

Desk Copy

CATALOGING COMPUTER FILES

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Outline

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 - A. Computer software
 - B. Interactive multimedia
 - C. Data sets

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Selected MARC Fields Used in Computer File Cataloging (From USMARC Concise Bibliographic Format)

Type of record: (Leader 06)

m Computer file

Code m indicates that the content of the record is for the following classes of electronic resources: computer software (including programs, games, fonts), numeric data, computer-oriented multimedia, online systems or services. For these classes of materials, if there is a significant aspect that causes it to fall into another Type category, code for that significant aspect (e.g., vector data that is cartographic is not coded as “number” but as cartographic). Other classes of electronic resources are coded for their most significant aspect (e.g., language material, graphic, cartographic material, sound, music, moving image). In case of doubt or if the most significant aspect cannot be determined, consider the item a Computer file.

008 Fixed-Length Data Elements COMPUTER FILES (NR)

18 Frequency [OBSOLETE]

19 Regularity [OBSOLETE]

22 Target audience

Unknown or not specified

a Preschool

b Primary

c Elementary and junior high

d Secondary (senior high)

e Adult

f Specialized

g General

j Juvenile

23-25 Undefined; each contains a blank or fill character ()

26 Type of computer file

a Numeric data

b Computer program

c Representational

d Document

e Bibliographic data

- f Font
- g Game
- h Sound
- i Interactive multimedia
- j Online system or service
- m Combination
- u Unknown
- z Other

27 Undefined; contains a blank or fill character ()

27 Type of machine [OBSOLETE]

28 Government publication

- # Not a government publication
- a Autonomous or semi-autonomous component
- c Multilocal
- f Federal/national
- i International intergovernmental
- l Local
- m Multistate
- o Government publication--level undetermined
- s State, provincial, territorial, dependent, etc.
- u Unknown if item is government publication
- z Other

29-34 Undefined; each contains a blank or fill character ()

256 COMPUTER FILE CHARACTERISTICS (NR)

Indicators

Both undefined; each contains a blank

Subfield Codes

\$a Computer file characteristics (NR)

This field is used to record characteristics pertaining to a computer file. It may contain information about the type of **file** (e.g. Computer programs), the number of records, statements, etc.

Examples

256 #a Computer data (2 files :876,000, 775,000 records).

256 +a Computer programs (2 files : 4300, 1250 bytes).

516 TYPE OF COMPUTER FILE OR DATA NOTE (R)

Indicators

First Display constant controller

No information provided

8 No display constant generated

Second Undefined; contains a blank (#)

Subfield Codes

\$a Type of computer file or data note (NR)

Examples:

Numeric (Summary Statistics)

Text (Law reports and digests)

538 SYSTEM DETAILS NOTE (R)

Indicators

Both undefined; each contains a blank

Subfield Codes

\$a System details note (NR)

Contains system information about the item. Such information includes the presence or absence of certain kinds of codes or the physical characteristics of a computer **file** such as recording densities, parity, or blocking factors. For software, data such as software programming language, computer requirements (e.g. computer manufacturer and model, operating system, or memory requirements), and peripheral requirements (e.g., number of drives, number of terminals, or other peripheral devices, support software, or related equipment) can be recorded.

Examples:

538 **≠a** System requirements: IBM PC or compatible computer with at least 640K RAM (386 or above recommended); MS-DOS or PC DOS 3.0 or higher; one floppy disk drive and a hard disk; a printer (optional)

538 **≠a** System requirements: IBM or compatible PC, 486 SX; 8 MB RAM (16 MB RAM recommended); Microsoft Windows 3.1; 640 x 480 VGA 256 col. display (800 x 600 SVGA 16 bit col. display recommended), sound card (MPEG card (Videologic) recommended).

753 SYSTEM DETAILS ACCESS TO COMPUTER FILES (R)

Indicators

Both **undefined**; each contains a blank

Subfield Codes

\$a Make and model of machine (NR)

\$b Programming language (NR)

\$c Operating system (NR)

This field is for technical details about a computer file. It is designed to allow access to records by their technical details, e.g. type of computer, operating system, etc.

Examples:

753 IBM PC

753 Apple II**e** **≠b** Applesoft BASIC

TERMS USED IN COMPUTER FILE CATALOGING

Accompanying material: A complementary part of a software package, physically separate from the software and frequently in a different medium, such as a user's manual accompanying a computer disk. Materials that accompany computer software include documentation of various kinds, codebooks, reference cards, keyboards, templates, maps, audiocassettes, tutorials and other items. (ANSI/NISO Z39.67-1993)

ASCII: Acronym for American Standard Code for Information Interchange. A coding scheme that assigns numeric values to letters, numbers, punctuation marks, and certain other characters. By standardizing the values for these characters, ASCII enables computers and computer programs to exchange information. (Microsoft)

Browsers: Software programs for reading hypertext documents. Browsers are mounted locally either on site for terminal mode or on the user's PC. Mosaic and Lynx are examples of hypertext browsers used to view World Wide Web documents. Mosaic is graphical, Windows or Mac based; Lynx is a text-only terminal mode browser. They all allow a user to read and follow hypertext links specified in a document. They vary in their ability to handle graphic or sound files. (CCM)

Client: A software application that works on your behalf to extract a service from a server somewhere on the network. (Krol)

Computer file: A file (data and/or programs) encoded for manipulation by computer. (AACR2)

Computer file serial: Serial issued on an ongoing basis in machine-readable format, such as CD-ROM, floppy disk, (direct access) or an electronic journal available via the **internet** (remote access). (CCM)

Container: Any housing for an item, a group of items, or part of an item that is physically separable from the material being housed. See also physical carrier. (AACR2)

Database: 1) Set of interrelated files that is created and managed by a database management system; 2) Any electronically-stored collection of data. (Freedman).

Direct access computer files: The use of computer files via carriers (e.g. disks, cassettes, cartridges) designed to be inserted into a computer or its auxiliary equipment by the user. (AACR2)

Disc: A round, flat piece of nonmagnetic, shiny metal designed to be read from and written to by optical (laser) technology. It is now standard practice to use the spelling "disc" for optical discs and the spelling "disk" in all other computer contexts, such as floppy disk, hard disk, etc. (Microsoft)

File name: A designation used in a computer system to identify a file. Sometimes a file name is called a “data set name.” (AACR2)

Floppy Disk: Removable storage medium. Also called a diskette, the medium is a single round disk of flexible tape-like material housed in a square envelope (usually 5 1/4") or (hard plastic 3 1/4") cartridge. (Freeman)

Graphical User Interface (GUI): A graphics-based (i.e. Windows, icons, etc.) software interface for video, computer or interactive multimedia systems. Users generally use a mouse or other pointing device to issue commands and otherwise interact with the system or application. (GBDIM)

Hardware: The physical components of a computer system, including any peripheral equipment such as printers, modems, and mice. (Microsoft)

Interactive multimedia: Media residing in one or more physical carriers (videodiscs, computer disks, computer optical discs, compact discs, etc.) or on computer networks. Interactive multimedia must exhibit both of these characteristics: 1) user controlled, nonlinear navigation using computer technology; and 2) the combination of two or more media (audio, text, graphics, images, animation, and video) that the user manipulates to control the order and/or nature of the presentation. (GBDIM)

Interactive multimedia work: The whole intellectual content of an interactive multimedia entity, which forms the basis for a single bibliographic description. The interactive multimedia work may comprise one or more kinds of entities or a collection or compilation of various entities that may or may not have been published or issued at the same time by the same issuing body. (GBDIM)

Internet: The world-wide “network of networks” that are connected to each other, using the IP protocol and other similar protocols. The **internet** provides file transfer, remote **login**, electronic mail, news, and other services. (Krol)

Joy Stick: Pointing device used to move an object on screen in any direction. It employs a vertical rod mounted on a base that contains one or more buttons. (Freedman)

LAN: Acronym for Local Area Network, a group of computers and other devices dispersed over a relatively limited area and connected by a communications link that enables any device to interact with any other on the network. (Microsoft).

Licensing Agreement: A contract for use of software, which may include a warranty, use limitations and other conditions for use (CCM)

Magnetic tape: Sequential storage medium used for data collection, backup and historical purposes. Like videotape, computer tape is made of flexible plastic with one side coated with a

ferromagnetic material. Tapes come in reels, cartridges and cassettes of many sizes and shapes. (Freedman)

Memory: The computer's working storage (physically, a collection of RAM chips). All program execution and data processing takes place in memory. (Freedman)

Modem: A piece of equipment that connects a computer to a data transmission line (typically a telephone line of some sort). (Krol)

MS-DOS: Microsoft-Disk Operating System. Single user operating system for PC's from Microsoft. (Freedman)

Navigational tools: These include various tools such as gopher, WAIS, WWW, Archie, etc. which make information on the Internet easier to locate and use. (CCM)

Nonlinear navigation: The ability of the user to determine freely the order of information retrieval in an interactive multimedia work. In an interactive multimedia work, the user may easily move through and explore the content of the work by choosing to move among points of information and existing pathways or links, altering those existing linkages and/or creating new linkages in the process. Hyperlinks or similar mechanisms make nonlinear navigation possible. (Users may also have the option of following prescribed or preset pathways and links, if desired.) (GBDIM)

Operating System: The software responsible for controlling the allocation and usage of hardware resources such as memory, central processing unit (CPU) time, disk space, and peripheral devices. The operating system is the foundation on which applications, such as word-processing and spreadsheet programs, are built. (Microsoft)

Peripheral: In computing, a term used for devices such as disk drives, printers, modems, and joysticks, that are connected to a computer and are controlled by its microprocessor. (Microsoft)

Physical carrier: A physical medium in which data, sound images, etc. are stored. For certain categories of material, the physical carrier consists of a storage medium (e.g. tape, film) sometimes encased in a plastic, metal, etc. housing (e.g. cassette, cartridge) that is an integral part of the item. (AACR2)

Platform: Hardware architecture of a particular model or computer family. It is the standard to which software developers write their programs. The term may also include the operating system. (Freedman)

Protocol: A mutually determined set of formats and procedures governing the exchange of information between different kinds of computers. (CCM)

RAM: Acronym for Random Access Memory. Semiconductor-based memory that can be read and written by the microprocessor or other hardware devices. The storage locations can be

accessed in any order. (Microsoft)

Remote access (computer files): The use of computer files via input/output devices connected electronically to a computer. (AACR2)

SGML (Standard Generalized Markup Language): A standard that provides a uniform way of formatting textual documents so that they can be read by different document processing tools. (CCM)

Search engine: The software used for search and retrieval in databases. This software determines the searching capabilities available to the user. (CCM)

Server: Software that allows a computer to offer a service to another computer. Other computers contact the server program by means of matching client software. Also, the computer on which the server software runs is often called the "server." (CCM)

Software: Instructions for the computer. A series of instructions that performs a particular task is called a program or software program. The two major categories are system software and application software. (Freedman)

Software package: The software, any related data files, the documentation, and any other accompanying material, all of which are available as a unit, although any of the components also might be available separately. (ANSIMISO 239.67-1993)

Specific material designation: A term indicating the special class of material (usually the class of physical object) to which an item belongs (e.g. sound disk, videocassette, etc.) (AACR2)

System details: System information about an item. Such information includes the presence or absence of certain kinds of codes or the physical characteristics of a computer file, such as recording densities, parity, or blocking factors. (USMARC)

System requirements: Information about the hardware and software required to run a software item. (ANSI/NISO Z39.67-1993)

Title screen (computer files): A display of data that includes the title proper and usually, though not necessarily, the statement of responsibility, and the data relating to the publication. (AACR2)

UNIX: Multiuser, multitasking operating system developed by AT&T that runs on a wide variety of computer systems from micro to mainframe. (Freedman)

Version: A specific edition of software, often distinguished by a numeric or other designation (e.g. "3.1," "Beta release," "Revised," "Macintosh version). May also be termed an edition, level, release, update, or upgrade. (ANSI/NISO Z39.67-1993)

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