

MARC 21 Specifications for Record Structure, Character Sets, and Exchange Media

EXCHANGE MEDIA

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INTRODUCTION

The use of an exchange medium (e.g., electronic, diskette, tape) is an integral part of sharing files of MARC 21 records. This section includes media format and labeling specifications for electronic file transfer (Part 1), microcomputer diskettes (Part 2), and magnetic tape (Parts 3 and 4) which are being used to exchange MARC 21 data. The specifications vary slightly for each medium to allow better utilization of the technology involved. Adherence to media format and labeling specifications is essential for successful exchange of MARC 21 records.

DEFINITIONS

The following terms with these specialized definitions are used in the exchange media specifications.

Italicized terms within definitions are terms for which definitions are also provided.

bibliographic file.

A *file* on the exchange medium (e.g., *diskette*) that contains MARC records. When generally used, the term can refer to MARC records containing authority, bibliographic, classification, community information, and holdings data.

blank.

ASCII character 20(hex). Also referred to as the space character.

block.

A collection of contiguously recorded characters written or read as a unit. Blocks are separated by an *interblock gap*. A block may contain one or more complete *records*, or it may contain segments of one or more *segmented*

records. A block does not contain multiple segments of the same record.

blocked record.

A *record* contained in a *file* in which each *block* may contain more than one record or *record segment*.

data element.

A defined unit of information.

diskette.

A physical exchange medium usually composed of a thin disk with a magnetic surface on both sides, enclosed in protective case. A variety of diskette sizes exist, 5.25 inches or 3.5 inches in diameter being the most common. Hardware to read from and write to such diskettes usually support various densities of encoded data.

field.

A defined character string that may contain one or more *data elements*.

file.

A set of related *records* treated as a unit. A file may form part of a physical or logical *volume*.

file section.

That part of a *file* that is recorded on any one *volume*. The sections of a file do not have sections of other files interspersed.

file transfer protocol (FTP).

A standard technique and syntax for communicating machine-readable data electronically in separate files without losing data or file integrity.

interblock gap.

A magnetically-erased section of tape separating *blocks* of information.

label.

A *record* at the beginning of a *volume*, and at the beginning and end of a *file section*, that identifies and characterizes that volume and file section. A label is not considered to be part of a file section. A label is identified by a three letter Label Identifier followed by a single character, the Label Number. Each label is recorded in a separate *block*.

label file.

File on an exchange medium that identifies and characterizes the content of the *file(s)* and/or *volume(s)*.

label group.

One or more contiguous *label sets*.

label set.

One or more contiguous *labels* with the same three initial characters (Label Identifier).

originating system.

An information processing system that writes *files* of MARC records for the purpose of data interchange with a *receiving system*.

receiving system.

An information processing system that is intended to read *files* of MARC records that have been processed by an *originating system* for the purpose of data interchange.

record.

Related pieces of data treated as a unit.

record segment.

That part of a *segmented record* that is contained in any one *block*. The segments of a record do not have segments of other records interspersed.

segment control word (SCW).

A fixed-length string used to indicate the type and content of a segment in a *file* of *segmented records*.

segmented record.

A *record* contained in a *file* in which each record consists of a sequence of one or more *record segments*. Records are contained in one or more consecutive *blocks*, such that only one segment of each record can appear in any one block.

tape.

A physical exchange medium usually composed of a thin acetate film in a variety of widths (2-inch (5.08cm), 1-inch (2.54cm), and 1/2-inch (1.27cm) tape are the most common). The acetate film can be housed on reels or in cartridges.

tape mark.

A special control block recorded on magnetic tape to serve as a separator between *file sections* and *label groups* and also between certain label groups.

transaction.

A single operation in which a *volume* or set of volumes of MARC *file(s)* is transferred from an *originating system* to a *receiving system*.

volume.

A physical or logical unit which includes part of a *file*, a complete file, or more than one file. For separate (dismountable) media (e.g., a reel of magnetic tape), a volume is usually a single physical unit. A volume contains *label file(s)* and one or more *bibliographic file(s)*. It may contain sections of files but does not contain multiple sections of the same file.

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