856 ELECTRONIC LOCATION AND ACCESS

Field Definition and Scope

Information required to locate an electronic resource.

The field may be used in an authority record to provide supplementary information available electronically about the entity for which the record was created. The information identifies the electronic location containing the resource or from which it is available. It also contains information to retrieve the resource by the access method identified in the first indicator position. It can be used to generate notes relating to mode of access.

Repeatable when the location data elements vary (subfields $a, $b, $d) and when more than one access method may be used. It is also repeatable whenever the electronic filename varies (subfield $f), except when a single intellectual item is divided into different parts for online storage or retrieval.

Subfields & Occurrence

Field/Subfield	Field/Subfield Name	Repeatability	Occurrence
856	ELECTRONIC LOCATION AND ACCESS	R	O
a	Host Name	R	O
b	Access Number	R	O
c	Compression Information	R	O
d	Path	R	O
e	Date and Hour of Consultation and Access	NR	O
f	Electronic Name	R	O
g	Uniform Resource Name	R	O
h	Processor of Request	NR	O
i	Instruction	R	O
j	Bits per Second	NR	O
k	Password	NR	O
l	Logon/Login	NR	O
m	Contact for Access Assistance	R	O
n	Name of Location of Host in Subfield $a	NR	O
o	Operating System	NR	O
p	Port	NR	O
q	Electronic Format Type	NR	O
r	Settings	NR	O
s	File Size	NR	O
t	Terminal Emulation	R	O
u	Uniform Resource Identifier (URI)	NR	O
v	Hours Access Method Available	R	O
w	Record Control Number	R	O
x	Nonpublic Note	R	O
y	Access Method	NR	O
z	Public Note	R	O

Indicators

Indicator	Value	Description
1		Specifies the Access Method
	#	No information provided
	0	Email
	1	FTP

	2	Remote login (Telnet)
	3	Dial-up
	4	HTTP
	7	Method specified in subfield $y
2	#	blank (not defined)

Subfields Description

$a Host Name

Repeatable.

$b Access Number

The access number is associated with a host.

It can contain the Internet Protocol (IP) numeric address if the item is an Internet resource, or a telephone number if dial-up access is provided through a telephone line. This data may change frequently and may be generated by the system, rather than statically stored. Subfield $b may be repeated if all the other information in the field applies. A telephone number is recorded as follows: [country code]-[area code]-[telephone number]. Example: 49-69-15251140 (a number in Frankfurt, Germany); 1-202-7076237 (a number in the U.S., Washington, D.C.). If an extension is applicable, include it after the telephone number preceded by "x". Example: 1-703-3589800x515 (telephone number with extension). Repeatable.

$c Compression Information

Repeatable.

$d Path

Repeatable.

$e Date and Hour of Consultation and Access

The time, in the form YYYYMMDDHHMM, at which the electronic item was last accessed. Not repeatable.

$f Electronic Name

The electronic name of a file as it exists in the directory/subdirectory indicated in subfield $d on the host identified in subfield $a.

Subfield $f may be repeated if a single logical file has been divided into parts and stored under different names. In this case, the separate parts should constitute a single bibliographic item. In all other cases, a file that may be retrieved under different filenames contains multiple occurrences of field 856, each with its corresponding electronic name in subfield $f. A filename may include wildcard characters (e.g., "*" or "?") if applicable, with a note in subfield $z explaining how files are named. NOTE: Filenames may be case sensitive for some systems. This subfield may also contain the name of the electronic publication or conference. Repeatable.

$g Uniform Resource Name

The URN, which provides a globally unique location independent identifier. Repeatable.

$h Processor of Request

The username, or processor of the request; generally the data which precedes the at sign ("@") in the host address. Not repeatable.

$i Instruction

An instruction or command needed for the remote host to process a request. Repeatable.

$j Bits per Second

The lowest and highest number of bits (binary units) of data that can be transmitted per second when connected to a host. The syntax for recording the number of bits per second (BPS) should be: [Lowest BPS]-[Highest BPS]. If only lowest given: [Lowest BPS]-. If only highest given: -[Highest BPS]. Not repeatable.

$k Password

Used to record general-use passwords and should not contain passwords requiring security. Not repeatable.

$l Logon/Login

General-use logon/login strings which do not require special security. Not repeatable.

$m Contact for Access Assistance

Repeatable.

$n Name of Location of Host in Subfield $a

Not repeatable.

$o Operating System

For information, the operating system used by the host specified in subfield $a is indicated in this subfield. Not repeatable.

$p Port

The portion of the address that identifies a process or service in the host. Not repeatable.

$q Electronic Format Type

Contains an identification of the electronic format type, which determines how data are transferred through a network.

Usually, a text file can be transferred as character data which generally restricts the text to characters in the ASCII (American National Standard Code for Information Interchange) character set (i.e., the basic Latin alphabet, digits 0-9, a few special characters, and most punctuation marks). Text files with characters outside of the ASCII set, or non-textual data (e.g., computer programs, image data) must be transferred using another file transfer mode, usually binary mode. Electronic format type may be taken from lists such as registered Internet Media types (MIME types). Not repeatable.

$r Settings

The settings used for transferring data.

Included in settings are: 1) Number Data Bits (the number of bits per character); 2) Number Stop Bits (the number of bits to signal the end of a byte); and 3) Parity (the parity checking technique used). The syntax of these elements is: [Parity]-[Number of Data Bits]-[Number of Stop Bits]. If only the parity is given, the other elements of settings and their related hyphens are omitted (i.e., [Parity]). If one of the other two elements is given, the hyphen for the missing element is recorded in its proper position (i.e., [Parity]--[Number of Stop Bits] or [Parity]-[Number of Data Bits]-). The values for parity are: O (Odd), E (Even), N (None), S (Space), and M (Mark). Not repeatable.

$s File Size

The size of the file as stored under the filename indicated in subfield $f.

It is generally expressed in terms of 8-bit bytes (octets). It may be repeated in cases where the filename is repeated and directly follows the subfield $f to which it applies. This information is not given for journals, since field 856 relates to the entire title, not to particular issues. Repeatable.

$t Terminal Emulation

Repeatable.

$u Uniform Resource Identifier (URI)

A Uniform Resource Identifier (URI), such as a URL (Uniform Resource Locator) or URN (Uniform Resource Name), serves as a standardized string that identifies a resource and provides electronic access via internet protocols. This allows for automated retrieval or interaction with the resource in a consistent manner.

Field 856 is structured to allow the creation of a URL by combining data from other 856 subfields.

Subfield $u may be used instead of those separate subfields or in addition to them. Not repeatable.

$v Hours Access Method Available

The hours that access to an electronic resource is available at the location indicated in this field. Repeatable

$w Record Control Number

Repeatable.

$x Nonpublic Note

Repeatable.

$y Access Method

The access method when the first indicator position contains value 7 (Method specified in subfield $y).

This subfield may include access methods other than the main TCP/IP protocols specified in the first indicator. The data in this subfield corresponds with the access schemes specified in Uniform Resource Locators (URL) (RFC 1738), a product of the Uniform Resource Identifiers Working Group of the IETF. The Internet Assigned Numbers Authority (IANA) maintains a registry of URL schemes and defines the syntax and use of new schemes. Not repeatable.

$z Public Note

Repeatable.

Notes on Field Contents

The information contained in this field is sufficient to allow for the electronic transfer of a file, subscription to an electronic journal, or logon to an electronic resource. In some cases, only unique data elements are recorded which allow the user to access a locator table on a remote host containing the remaining information needed to access the item.

Examples

EX 1
200 #1$aRussell,$bBertrand,$f1872-1970
856 4#$uhttp://plato.stanford.edu/entries/russell/russell.jpeg

The electronic resource is available by http.
EX 2
240 ##$1200#0$aLeonardo,$cda Vinci,$f1452-1519$1230##$aMona Lisa
856 4#$uhttp://sunsite.unc.edu/wm/paint/auth/vinci/joconde/
856 4#$uhttp://sunsite.unc.edu/wm/paint/auth/vinci/joconde/jpg
There are two electronic resources. The first is a description, the second is an image.
EX 3
210 02$aLibrary of Congress.$bCopyright Office
856 4#$uhttp://lcweb.loc.gov/copyright
EX 4
210 12$aInternational Conference on the Principles and Future Development of AACR2
856 4#$uhttp://www.nlc-bnc.ca/jsc/
EX 5
250 ##$aPresidents' spouses$zUnited States
856 4#$ahttp://www.firstladies.com

History

2001	New field.
2009	Updated definition/scope.
2024	Text edit.