

**D I G I T A L L I B R A R Y
F E D E R A T I O N**

Registry of Digital Masters

Record Creation Guidelines

Version 2.

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**Prepared by the
Digital Library Federation/OCLC Registry of Digital Masters Working Group (2001-2007)**

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1 Background

The concept of the Registry of Digital Masters¹ developed out of the work of the Digital Library Federation. The Registry has been implemented as a subset of OCLC WorldCat. These Record Creation Guidelines are based on two Digital Library Federation (DLF) papers describing the functionality of a digital registry, *Registry of Archival Masters of [Born] Digital Monographs and Serials Functional Requirements* and *Registry of Digital Reproductions of Paper-based Monographs*. The documents may be found on the DLF Web site (<http://www.diglib.org/collections/reg/reg.htm> or [digitally reformatted monographs and serials](#) and [born digital monographs and serials](#)).

These Guidelines use *MARC 21 Format for Bibliographic Data* elements and OCLC (Online Computer Library Center Inc.) current cataloging system functionality for Phase 1 of the DLF digital registry project. MARC 21 field 042 “dlr” indicates that a bibliographic record is in the Registry.

It is also recommended that the DLF [Benchmark for Faithful Digital Reproductions of Monographs and Serials](#) (<http://purl.oclc.org/DLF/benchrepro0212>) be used to document the minimum characteristics of digital materials: digital reproductions or born digital.

2 Purpose

By recording materials in the Registry, institutions are signaling the intent to preserve and maintain the accessibility of the described materials over an extended timeframe. This implies that materials were born digital or have been converted to digital form, that the digital objects are stored in professionally managed systems, and that the institution is committed to retain and preserve them. When registered, materials should already be digitized, or be in an active queue for digitization. It is recommended, but not required, that a use copy (a network-accessible, but not necessarily free, copy) of any material registered be available on-line to the general public. Where digitally reformatted materials are concerned, reproductions should be of meaningful bibliographic entities.

These guidelines detail which MARC 21 elements should be used to carry Registry-required information. Registry records describe materials that an institution intends to digitize, either from existing paper- and/or microfilm-based materials (“intent to digitize”), as well as born digital materials, and to indicate the standards by which the registered objects have been digitized.

A Registry record also provides information about whether a specific item has already been digitized, and if so, whether the digitization has been done at an adequate level such that another digital copy is not required, what institution is responsible for the digitization, what institution is responsible for the preservation of the digital content, and what specific materials are available.

3 Implementation Guidelines

The guidelines, produced under the aegis of the DLF Registry of Digital Masters Working Group, are designed to promote consistency in how Registry information is recorded, enabling more effective services to be developed for libraries and for users. We encourage all institutions taking preservation responsibility for digital content to produce records using the Registry elements and MARC 21 as described in this document and in the two DLF papers.

¹ Here after referred to as the “Registry”.

The MARC record should have a description of the born digital object or a digital reproduction. It should reference detailed holdings when appropriate, so that others can accurately gauge the extent of the digital material. The metadata may be derived from inspection of the physical material, the microform, or the digital object itself. One bibliographic record could represent all versions of an item, but it is preferred that a separate record be supplied for each manifestation when physical formats and system requirements differ from the original form of an item/object.

All Registry records should conform to either at least the first level of description from Anglo-American Cataloging Rules, 2nd edition², 2002 Revision or a national equivalent. In addition, the following MARC 21 fields should be used as appropriate to record DLF digital registry information as described in the guidelines:

- 007/00 for electronic resource
- 007/11 for source of a digital file
- 007/13 for access and/or preservation indicator
- 042 for identification of Registry materials
- 506 for access restrictions
- 533 for reproduction notes
- 534 for original production notes [not recommended]
- 538 for technical details about digital resource
- 583 for preservation/reproduction actions and/or links
- 856 for access to electronic resources

4 When to Use the Registry

The following table describes the type of item available—1) Master Only 2) Use Copy Only 3) Master/Use Copy 4) No Master/No Use Copy— and whether to include that type of item in the Registry or not:

Type of Item	Inclusion in the Registry ³
Master only	Yes, may reside in the Registry.
Use copy only	No, a bibliographic record may not be within the subset that represents the Registry, but may be in OCLC WorldCat.
Master/Use copy	Yes, may reside in the Registry.
No Master/No Use copy	No, may not reside in the Registry.

² Anglo-American Cataloging Rules, 2nd edition, updates 2003-2005, published jointly by the American Library Association (ALA), The Canadian Library Association (CLA), and the Chartered Institute of Library and Information Professionals (CILIP), 2005.

³ MARC 21 field 042 \$a indicates that a digital object is included in the Registry, a subset of OCLC WorldCat.

5 How Does This Fit in With What Your Institution is Doing or Intends to Do?

There may already be digitization projects at your institution or you may be planning to digitize materials in the future, or you may be collecting born digital content. You may already require or have accessible the technical and preservation information standards used to digitize materials. The Registry and use of standard metadata⁴ can be used as verification of your digitization or intent to digitize methodology, that you conform to standards and best practices, provide consistency when describing digital or queued materials, and express your commitment to maintain and preserve the digital materials for the long term.

Whether you add new bibliographic records for digitized materials or update existing records for print materials with intent to digitize information, searching and contributing to the Registry may help determine what to or what not to digitize for your or any other institution.

6 Contribution to the Registry (via OCLC WorldCat)

There are several options for contribution to the Registry:

- Adding records for materials not in WorldCat
 - Online input
 - Online import – may import a file of records to the OCLC Connexion save file⁵
 - Offline batch import – may send a file of records
- Updating existing records in WorldCat
 - Online input – incorporate Registry information into current workflow
 - Online import – not available for updating
 - Offline batch – may send a file of records

7 Access to Registry Records

OCLC availability and access to Registry records: Registry records may be searched in OCLC Connexion and FirstSearch WorldCat by the label “ac” (authentication code). A typical search would be “ac=dlr⁶”.

Public access is also available on the Digital Library Federation Web site at <http://purl.oclc.org/DLF/collections/reg/OCLCservice>.

⁴ For example, use of the first level of description in AACR2 or a national equivalent.

⁵ Import OCLC-MARC or MARC21 records only. No prescribed maximum for file size (KB or MB). Connexion imports records in groups of 100, pausing after each group to ask you to confirm that you want to continue. Maximum number of records you can import depends on the number of records currently in your bibliographic or authority save file. Save files can contain up to 9,999 records.

⁶ “The MARC code for the Registry of Digital Masters is “dlr”.

8 How to Get Started⁷

What do I need to get started? In addition to these guidelines, it may be useful to have access to the following documents referred to in section 1 of the guidelines⁸:

- *DLF Benchmark for Faithful Digital Reproduction of Monographs and Serials*
<http://purl.oclc.org/DLF/benchrepro0212>
Provides the guidance and recommendations for documenting minimum characteristics that digital objects share. For material converted in accordance with this benchmark, this information may be linked from the Registry record using MARC 21 field 538 \$u.
- *Preservation & Digitization Actions: Terminology for MARC 21 Field 583*
<http://www.loc.gov/marc/bibliographic/pda.html>
Provides controlled vocabulary for your preservation and digitization actions used in MARC 21 field 583 subfield \$a.
- *Standardized Terminology for Access Restriction*
<http://purl.oclc.org/NET/506Vocabulary>
Provides controlled vocabulary, whether or not access restrictions exist, used in MARC 21 field 506 subfield \$f.
Note that subfield \$f has not been implemented in systems as of May 2007; it will be used when it is available. In the meantime, use subfield \$a.

You may also use the “cheat sheet”, or a short list of minimum Registry requirements, in Section 12, Registry Requirements, of the guidelines, to help you through the process. Although some fields are listed as optional, it is suggested that you include the information if known.

We will now walk through several scenarios of what needs to be included in a Registry of Digital Masters record, or “Registry record”.

⁷ Intended for OCLC Connexion users, this exercise is illustrative and may not reflect any particular situation. You may need to add or change other fields to create an electronic resource record to pass Connexion validation. Any URLs are for illustration purposes only.

⁸ The guidelines only include MARC fields that need to be added to satisfy requirements for the Registry and not all MARC fields that are needed to describe a digital object or what access points to include. See the Appendix A for details on MARC fields used to describe Registry records.

8.1 Intent to Digitize from print copy (separate record approach)

You intend to digitize an item. Although there is a print copy record available in OCLC WorldCat, there is no metadata for a digitized version. You have determined by what standards the item is to be digitized. In addition to other required MARC 21 fields, you would include the following Registry fields on a new record (if you are following the separate record approach):

- ◆ **007/00 c** (\$a c) (Category of material) – code for electronic resource
- ◆ **007/11** (\$j) (Antecedent/Source) – source of the file; dependent on the project and/or the object
- ◆ **007/13 p** (\$l p) (Reformatting Quality) – code for the preservation copy
- ◆ **007/13 a** (\$l a) (Reformatting Quality) – code for the access copy

Examples:

007 \$a c \$j a \$l p

007 \$a c \$j c \$l a

- ◆ **042** (Authentication Code) – code for **dlr**; this field may be added or edited by Full or higher authorizations.

042 \$a dlr

Note: 042 is not a repeatable field. If more than one 042 code is needed, repeat subfield \$a.

- ◆ **506** (Restrictions on Access Note) – Whether access is restricted or not, access to a digital object must be specified. Terminology for 506 \$f is described in *Standardized Terminology for Access Restriction*. Examples:

506 \$3 Master copy \$a preservation copy \$f No online access \$2 star

506 \$3 Use copy \$f Preview only \$2 star \$u <http://conditionalurl.htm>

Note: The master copy need not be available; however, a use copy could be accessible, although not necessarily for “free”.

Note: Subfield \$f has not been implemented in systems as of May 2007; it will be used when it is available. In the meantime, use subfield \$a.

- ◆ **538** (System Details Note) Describes technical details about the electronic resources. A URI may be included for more detailed information. Examples:

538 \$a Master copy and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. \$u <http://purl.oclc.org/DLF/benchrepro0212>

- ◆ **583** (Action Note) Records information about processing, reference and preservation actions. Use *Preservation & Digitization Actions: Terminology for MARC 21 Field 583* for the most current terminology when describing the institution’s commitment to preservation (the archiving institution) and/or further actions taken on born digital objects, such as migration to a different format. The first indicator indicates whether or not the field content is suitable for public display. Use \$h to record the archiving institution. Use the phrase “committed to preserve” in \$l. Example:

583 1 \$a Will digitize \$c 2007 \$h [name of archiving institution] \$l committed to preserve \$2 pda \$5 [your MARC organization code]

Note: \$2 pda is the code (from *MARC Code Lists for Relators, Sources, Description Conventions*) used for the Terminology 583 document.

Note: Field 856 is not required as it is unknown at this stage of the process and would be added when the material is online.

8.2 Digitization of print copy complete (separate record approach)

The digitization of a print copy is complete. In addition to other required MARC 21 fields, you would include the following Registry fields on a new record (if you are following the separate record approach):

- ◆ **007/00 c (\$a c)** (Category of material) – code for electronic resource
- ◆ **007/11 (\$j)** (Antecedent/Source) – source of the file; dependent on the project and/or the object
- ◆ **007/13 p (\$1 p)** (Reformatting Quality) – code for the preservation copy
- ◆ **007/13 a (\$1 a)** (Reformatting Quality) – code for the access copy

Examples:

007 \$a c \$j a \$1 p

007 \$a c \$j a \$1 a

007 \$a c \$j c \$1 a

- ◆ **042** (Authentication Code) – code for **dlr**; this field may be added or edited by Full or higher authorizations.

042 \$a dlr

Note: 042 is not a repeatable field. If more than one 042 code is needed, repeat subfield \$a.

- ◆ **506** (Restrictions on Access Note) – Whether access is restricted or not, access to a digital object must be specified. Terminology for 506 \$f is described in *Standardized Terminology for Access Restriction*. Examples:

506 \$3 Master copy \$a preservation copy \$f No online access \$2 star

506 \$3 Use copy \$f Preview only \$2 star \$u <http://conditionalurl.htm>

Note: The master copy need not be available; however, a use copy could be accessible, although not necessarily for “free”.

Note: Subfield \$f has not been implemented in systems as of May 2007; it will be used when it is available. In the meantime, use subfield \$a.

- ◆ **538** (System Details Note) Describes technical details about the electronic resource. A URI may be included for more detailed information. Examples:

538 \$a Master and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. \$u <http://purl.oclc.org/DLF/benchrepro0212>

- ◆ **533** (Reproduction Note) Need to provide agency responsible for the reproduction which may be different from preservation institution. Holdings information may be recorded here. Example:

533 \$a Electronic reproduction. \$b [Chicago] : \$b University of Chicago, \$c [2007] \$5 ICU

- ◆ **583** (Action Note) Records information about processing, reference and preservation actions. Use *Preservation & Digitization Actions: Terminology for MARC 21 Field 583* for the most current terminology when describing the institution’s commitment to preservation (the archiving institution) and/or further actions taken on born digital objects, such as migration to a different format. The first indicator indicates whether or not the field content is suitable for public display. Use \$h to record the archiving institution. Use the phrase “committed to preserve” in \$l. Example:

583 1 \$a Digitized \$c 2007 \$h [name of archiving institution] \$l committed to preserve \$2 pda \$5 [your MARC organization code]

Note: \$2 pda is the code (from *MARC Code Lists for Relators, Sources, Description Conventions*) used for the Terminology 583 document.

- ◆ **856** (Electronic Location and Access) -- A persistent link to the master and/or use copy. Example:

856 40 \$3 use copy \$z Full text, Acrobat Reader required \$u <http://validurl.htm>

- ◆ 1st 4 = http (Hypertext Transfer Protocol)
- ◆ 2nd 0 = Resource (for the same source as described)

8.3 Born Digital Object

You want to add a born digital object to the Registry. There is no metadata version available in WorldCat. In addition to other required MARC 21 fields, you would include the following Registry fields:

- ◆ **007** For most born digital objects, field 007, subfields \$j and \$l, are not applicable, but may be applicable for reformatted digital materials.

- ◆ **007/00 c** (\$a c) (Category of material) – code for electronic resource

Example:

007 \$a c

- ◆ **042** (Authentication Code) – code for **dlr**; this field may be added or edited by Full or higher authorizations.

042 \$a dlr

Note: 042 is not a repeatable field. If more than one 042 code is needed, repeat subfield \$a.

- ◆ **506** (Restrictions on Access Note) – Whether access is restricted or not, access to a digital object must be specified. Terminology for 506 \$f is described in *Standardized Terminology for Access Restriction*. Examples:

506 \$3 Master copy \$a preservation copy \$f No online access \$2 star

506 \$3 Use copy \$f Preview only \$2 star \$u http://conditionalurl.htm

Note: The master copy need not be available; however, a use copy could be accessible, although not necessarily for “free”.

Note: Subfield \$f has not been implemented in systems as of May 2007; it will be used when it is available. In the meantime, use subfield \$a.

- ◆ **538** (System Details Note) Describes technical details about the electronic resource. A URI may be included for more detailed information. Use of the 538 for born digital objects may only be applicable for migration activities, unless there are other pertinent technical details to record. Example:

538 \$a Master and use copy.

- ◆ **583** (Action Note) Records information about processing, reference and preservation actions. Use *Preservation & Digitization Actions: Terminology for MARC 21 Field 583* for the most current terminology when describing the institution’s commitment to preservation (the archiving institution) and/or further actions taken on born digital objects, such as migration to a different format. The first indicator indicates whether or not the field content is suitable for public display. Use \$h to record the archiving institution. Use the phrase “committed to preserve” in \$l. Example:

583 1 \$h [name of archiving institution] \$l committed to preserve \$2 pda \$5 [your MARC organization code]

583 1 \$z NLM permanence rating: \$1 Permanent: Dynamic Content \$5 DNLM

Note: 583 is a repeatable field.

- ◆ **856** (Electronic Location and Access) -- A persistent link to the master and/or use copy. Example:

856 40 \$3 use copy \$z Full text, Acrobat Reader required \$u http://validurl.htm

- ◆ 1st 4 = http (Hypertext Transfer Protocol)
- ◆ 2nd 0 = Resource (for the same source as described)

Note: Fields 533 and 534 would not be used for a born digital object unless the object was transformed digitally from one electronic form to another.

8.4 Reformatted digital object

You have reformatted previously digitized materials from another source or from a born digital object. You now need to create metadata for the reformatted materials and add Registry minimum requirements.

- ◆ **007/00 c** (\$a c) (Category of material) – code for electronic resource
- ◆ **007/11** (\$j) (Antecedent/Source) – source of the file; dependent on the project and/or the object
- ◆ **007/13 p** (\$l p) (Reformatting Quality) – code for the preservation copy
- ◆ **007/13 a** (\$l a) (Reformatting Quality) – code for the access copy

Examples:

007 \$a c \$j c \$l p

007 \$a c \$j c \$l a

007 \$a c \$j a \$l a

- ◆ **042** (Authentication Code) – code for **dlr**; this field may be added or edited by Full or higher authorizations.
042 \$a dlr
- ◆ **506** (Restrictions on Access Note) – Whether access is restricted or not, access to a digital object must be specified. Terminology for 506 \$f is described in *Standardized Terminology for Access Restriction*.
Examples:

506 \$3 Master copy \$a preservation copy \$f No online access \$2 star

506 \$3 Use copy \$f Preview only \$2 star \$u <http://conditionalurl.htm>

Note: The master copy need not be available; however, a use copy could be accessible, although not necessarily for “free”.

Note: Subfield \$f has not been implemented in systems as of May 2007; it will be used when it is available. In the meantime, use subfield \$a.

- ◆ **533** (Reproduction Note) Need to provide agency responsible for the reproduction which may be different from preservation institution. Holdings information may be recorded here. Example:
533 \$a Electronic reproduction. \$b [Chicago] : \$b University of Chicago, \$c [2007] \$5 ICU
- ◆ **538** (System Details Note) Describes technical details about the electronic resource. A URI may be included for more detailed information. Use of the 538 for born digital objects may only be applicable for migration activities, unless there are other pertinent technical details to record. Example:
538 \$a Master and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. \$u <http://purl.oclc.org/DLF/benchrepro0212>
- ◆ **583** (Action Note) Records information about processing, reference and preservation actions. Use *Preservation & Digitization Actions: Terminology for MARC 21 Field 583* for the most current terminology when describing the institution’s commitment to preservation (the archiving institution) and/or further actions taken on born digital objects, such as migration to a different format. The first indicator indicates whether or not the field content is suitable for public display. Use \$h to record the archiving institution. Use the phrase “committed to preserve” in \$l. Example:
583 1 \$a Transformed digitally \$c 20071201 \$h [name of archiving institution] \$l committed to preserve \$2 pda \$5 [your MARC organization code]
- ◆ **856** (Electronic Location and Access) – A persistent link to the master and/or use copy. Example:
856 40 \$3 use copy \$z Full text, Acrobat Reader required \$u <http://validurl.htm>
 - ◆ 1st 4 = http (Hypertext Transfer Protocol)
 - ◆ 2nd 0 = Resource (for the same source as described)

9 Sample Records

Records in this section are produced as sample purposes only. They are not actual records; they may have been derived from pre-AACR2 print versions or a variety of local systems. Not all fields may be consistent with current coding or other standards. Registry fields are compatible with guideline practice at the time of the version release. Note: | = \$.

9.1 Example 1: Intent to digitize from a print copy

LDR	01159cas 2200349 450
001	390305
005	\$10409120000.0
007	an --- a aap
007	an --- a aaa
008	851114d18791913mdumr p s 0 0engdd
040	__ a COO c COO
042	__ a dlr
245	00 a American chemical journal h [electronic resource].
260	__ a Baltimore b [s.n.]
300	__ a 50 v. b ill., plates, diags., tables. c 22-24 cm.
310	__ a Monthly, b 1899-1913
321	__ a Irregular, b 1879-1898
362	0_ a v. 1-50; Apr. 1879-Dec. 1913.
506	__ 3 Use copy a Must be on campus f Online access with authorization 2 star
533	__ a Electronic reproduction. m Vol. 1-50 (Apr. 1879-Dec. 1913) b Ithaca, N.Y. : c Cornell University, d 2006.
538	__ a Master and use copy. u [URL with digitization standards and access to be supplied.]
555	__ a Vols. 1-10, 1879-88. 1 v.; Vols. 11-20, 1889-98. 1 v.; Vols. 21-50, 1899-1913. 1 v.
570	__ a Editors: 1879-1913, Ira Remsen (with C.A. Rouiller, 1911-13)
583	__ a will digitize c 20061103 z Queued for digitization, Nov. 4, 2006 h Cornell University l committed to preserve 2 pda 5 NIC
650	_0 a Chemistry x Periodicals.
700	1_ a Remsen, Ira, d 1846-1927, e ed.
700	1_ a Rouiller, Chas. A. q (Charles August), d b. 1883 e ed.
785	04 t Journal of the American Chemical Society x 0002-7863
856	40 z http://[To_be_determined.]

9.2 Example 2: Intent to digitize from a print copy

LDR	00985cas 2200277 450
001	396345
005	19911002120000.0
007	cr an --- a aap
007	cr an --- a aaa
008	851204d18421859enkuu p s 0 0eng d
040	__ a COO c COO
042	__ a dlr
245	00 a Chemical gazette h [electronic resource] : b or, Journal of practical chemistry, in all its applications to pharmacy, arts and manufactures.
246	30 a Journal of practical chemistry, in all its applications to pharmacy, arts and manufactures
260	__ a London : b R. and J. E. Taylor [etc.].
300	__ a 17 v. ; c 22 cm.
362	0_ a v. 1-17; Nov. 1, 1842-Dec. 15, 1859.
506	__ 3 Use copy a Open access f Unrestricted online access 2 star
533	__ a Electronic reproduction. m Vol. 1-17; (Nov. 1, 1842-Dec. 15, 1859) b Ithaca, N.Y. : c Cornell University, d 2006.
538	__ a Master and use copy. u [URL with digitization standards and access to be supplied.]
570	__ a V. 1: Conducted by William Francis and Henry Croft.
580	__ a Merged into the Chemical news.
583	__ a will digitize c 20061106 z Queued for digitization, Nov. 6, 2006 h Cornell University committed to preserve 2 pda 5 NIC
650	_0 a Chemistry x Periodicals.
700	1_ a Francis, William, d 1817-1904, e ed.
700	1_ a Croft, Henry, e ed.
785	14 t Chemical news
856	40 z http://[To be determined.]

9.3 Example 3: Intent to transform a digital copy

LDR	01132cas 2200313 a 450
001	1118394
005	19980420120000.0
007	cr an ---a aap
007	cr an ---a aaa
008	860711d18311865mauw r nes 0 0eng d
040	__ a COO c COO
042	__ a dlr
130	0_ a Liberator (Boston, Mass.)
245	04 a The liberator h [electronic resource].
260	__ a Boston, Mass. : b William Lloyd Garrison and Isaac Knapp, c 1831-1865.
300	__ a 35 v. : b ill. +c 39-64 cm.
310	__ a Weekly
362	0_ a Vol. 1, no. 1 (Jan. 1, 1831)-v. 35, no. 52 (Dec. 29, 1865).
500	__ a Motto: "Our country is the world - our country men are mankind."
500	__ a Title from caption.
506	__ 3 Use copy a No restrictions f Unrestricted online access 2 star
515	__ a Issues for Jan. 3, 1840-Dec. 29, 1865 also called whole no. 470-1803.
533	__ a Electronic reproduction. m Vol. 1, no. 1 (Jan. 1, 1831)-v. 35, no. 52 (Dec. 29, 1865) b Ithaca, N.Y. : c Cornell University, d 2002.
538	__ a Master and use copy. u [URL with digitization standards and access to be supplied.]
570	__ a Editor: 1831- , W.L. Garrison.
583	__ a will transform digitally c 20061104 h Cornell University l committed to preserve z Queued for transformation, Nov. 4, 2006 2 pda 5 NIC
655	_7 a Newspapers z Massachusetts z Boston 2 rbgenr
700	1_ a Garrison, William Lloyd, d 1805-1879
752	__ a United States b Massachusetts c Suffolk d Boston.
856	40 z http://[To be determined.]

9.4 Example 4: Digitization Complete

LDR	00520nam 2200157 a 4500
001	006957201-1
005	20030327094311.0
007	cr n b p
007	cr n b a
008	960715s1828 ag 000 0 spa d
040	-- a HLS c HLS d HMM
042	-- a dlr
043	-- a s-ag---
100	1 _ a Sosa, Juan Agustín de.
245	1 0 a Sermón predicado en el día de la publicación del jubileo del Año Santo h [electronic resource] : b que se hizo en la iglesia matriz de la ciudad de Mendoza / c por el presbitero don Juan Agustin de Sosa a catorce de septiembre del año de 1828.
260	-- a [Mendoza?] : b Francisco Ederra, c [1828?]
300	-- a 24 p. ; c 20 cm.
500	-- a Title from caption.
500	-- a "Se hallará en el almacén de D. Francisco Ederra"--Colophon.
500	-- a The jubilee of the Holy Year, celebrated at Rome in 1825, was extended to the whole world in 1826 by Pope Leo XII in his brief "Exultabat spiritus noster."
506	-- 3 Use copy a No restrictions on use f Unrestricted online access 2 star
506	-- a Digital master available to research institutions for non-commercial use.
533	-- a Electronic reproduction. b Cambridge, Mass. : c Harvard College Library Digital Imaging Group, d 2003. f (Latin American pamphlet digital project at Harvard University ; 0005). n Electronic reproduction from microfilm master negative produced by Harvard College Library Imaging Services. 7 s2003^^^maun^s
538	-- a Master and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. u http://purl.oclc.org/DLF/benchrepro0212
583	1 _ a Digitized c 2003 h Harvard University l committed to preserve 2 pda 5 MH
650	0 _ a Holy Year, 1825.
610	2 0 a Catholic Church z Argentina z Mendoza.
655	7 _ a Sermons z Argentina y 19th century. 2 rbgenr
700	1 _ a Montt, Luis, d 1848-1909, e former owner. 5 MH
752	-- a Argentina d Mendoza.
830	0 _ a Latin American pamphlet digital project at Harvard University ; v 0005.
856	4 0 u http://nrs.harvard.edu/urn-3:FHCL:66721 z Provides access to page images of entire work.

9.5 Example 5: Digitization Complete

LDR	01790cam 22003251 4500
001	dlr05003696
003	DLC
005	20040312164523.0
007	cr a p
007	cr a a
008	830714s1763 stkb s 000 0 eng
040	__ a DLC c CarP d DLC
042	__ a dlr
043	__ a a----- a a-cc--- a e-ur---
050	0 0 a DS7 b .B42
100	1 _ a Bell, John, d 1691-1780.
245	1 0 a Travels from St. Petersburg, in Russia, to diverse parts of Asia ... h [electronic resource] c By John Bell ...
260	__ a Glasgow, b Printed for the author by R. and A. Foulis, c 1763.
300	__ a 2 v. b front. (fold. map) c 25 x 20 cm.
505	0 _ a I. A journey to Ispahan in Persia, in the years 1715, 1716, 1717, and 1718. Part of a journey to Pekin in China, through Siberia, in the years 1719, 1720, and 1721. With a map of the author's two routes between Mosco and Pekin.--II. The continuation of the journey between Mosco and Pekin. To which is added (with special t.p.) a translation of the Journal of Mr. de Lange, resident of Russia at the court of Pekin, in the years 1721 & 1722. A journey from Mosco to Derbent in Persia, in the year 1722. A journey from St. Petersburg to Constantinople in the years 1737 and 1738.
506	__ 3 Use copy a No restrictions f Unrestricted online access 2 star
533	__ a Electronic reproduction. b Washington, D.C. : c Library of Congress.
538	__ a Master and use copy. u [URL with digitization standards and access.]
583	__ a Digitized c 2003 h Harvard University l committed to preserve 2 pda 5 DLC
651	_ 0 a Asia x Description and travel.
651	_ 0 a Russia x Description and travel.
651	_ 0 a China x Foreign relations z Russia.
651	_ 0 a Russia x Foreign relations z China.
700	_ 1 a Lange, Lorenz.
710	2 _ a Pre-1801 Imprint Collection (Library of Congress) 5 DLC
776	0 _ c Original w (DLC) 05003696
856	4 0 3 Volume 1 d mtfrb f 03696a q h u http://hdl.loc.gov/loc.rbc/mtfrb.03696a
856	4 0 3 Volume 2 d mtfrb f 03696b q h u http://hdl.loc.gov/loc.rbc/mtfrb.03696b

9.6 Example 6: Born Digital

LDR	tmla
007	a e
008	50228s2003 pau eng d
040	__ a CMU c CMU
042	__ a dlr
100	1_ a Torut, Buraskorn.
245	10 a Analyzing economic profit in the brokerage industry h [electronic resource] / c Buraskorn Torut.
260	__ a Pittsburgh, PA : b Carnegie Mellon University, c 2003.
500	__ a Primary academic department -- Information Systems.
500	__ a Thesis department -- Graduate School of Industrial Administration.
502	__ a Thesis (B.S. with honors)--Carnegie Mellon University, 2003.
506	__ f Unrestricted online access 2 star
538	__ a Digitization specifications available at u [URL]
583	1_ c 2003 h Carnegie Mellon University l committed to preserve 2 pda 5 PPIc
610	20 a Carnegie Mellon University x Dissertations.
700	1_ a Parlour, Christine, e advisor.
700	1_ a Rajan, Uday, e advisor.
710	2_ a Carnegie Mellon University. b Graduate School of Industrial Administration.
856	40 u http://doi.library.cmu.edu/10.1184/LOCAL/a986157 z Electronic Access

9.7 Example 7: Digital Transformation

LDRnam 22 a 4500
005	20020122000000.0
007	cr cn c p
007	cr cn c a
008	20030904s1998 xx 000 0 eng a
040	-- a VA@ c VA@ d OCL
042	-- a dlr
100	1 _ a Connelly, Zachary D.
245	10 a Electronic submission of undergraduate Thesis h [electronic resource] : b modification of the University of Virginia electronic thesis submittal system / c Zachary D. Connelly.
256	-- a Electronic text data (ca. 145 kilobytes).
260	-- c 1998.
506	-- 3 Use copy f Preview only 2 star u http://conditionalurl.htm
516	-- a Text and images (PDF)
533	-- a Electronic reproduction. b [S.I.] : c University of Virginia, d 2003. 7 s2003 xx s
538	-- a Master and use copy. Benchmark for Faithful Digital Reproductions of Monographs and Serials. Version 1. December 2002. Digital version conforms to: u http://purl.oclc.org/DLF/benchrepro0212 .
530	-- a Also available in print version.
500	-- a Computer Science-TCC402.
502	-- a Thesis (B.S.)--University of Virginia, 1998.
520	-- a "As more people gain access to the Internet, the ability to obtain information from different sources around the world will increase. To incorporate the University of Virginia's student body in this information revolution, an electronic publishing system was developed here for use by fourth year engineering students for their theses. After the pilot project was completed and successful, it was important that the system be modified for increased utility, both for the students and the library. This new system must eliminate many of the sources for user error and quicken the incorporation of theses into the library's computer system. This project's focus is to achieve these goals for use by the engineering class of 1998."
583	-- a Transformed digitally c 2003 h University of Virginia l Committed to preserve 2 pda 5 VA@
856	40 z Full text, Acrobat Reader required u http://viva.lib.virginia.edu/etd/theses/connelly98.pdf

9.8 Example 8: Serial - Single record approach

007	__ a c b r d b e n g 001 h a i p j a k d l p
007	__ a c b r d b e n g 001 h a i p j a k d l a
010	__ a 74648882 z 22002298
040	__ a DLC c DLC d NSD d NST d AIP d OCL d AIP d NSD d AIP d DLC d COO d CGU
012	__ a 4 b 3 d 7 e n f - g p h - j 0 l 1 m 1
022	0_ a 0002-9092 z 1
042	__ a c a nsdp a dlr
050	00 a S560 b .J6
210	0_ a Am. j. agric. econ.
222	_0 a American journal of agricultural economics
245	00 a American journal of agricultural economics.
260	__ a [St. Paul, MN, etc.] b American Agricultural Economics Association.
300	__ a v. c 23-26 cm.
310	__ a Five no. a year
362	0_ a v. 50- Feb. 1968-
500	__ a Vols. for <Nov. 2003-> published by Blackwell Publishing.
500	__ a Vols. for <1982-> include the proceedings of the annual meeting of the American Agricultural Economics Association.
500	__ a Vols. for 1984- have special biennial issue called: American Agricultural Economics Association. Directory.
506	0_ z v.50-77(1968-1995) f Unrestricted online access 2 star 5 NIC
506	0_ z v.78-81(1996-1999) f Unrestricted online access 2 star 5 ICU
530	__ a Also issued on CD-ROM.
533	__ z v.50-77(1968-1995) a Also available as electronic reproduction. b [Ithaca, New York] : c Cornell University Library, d [2001] n Files for the images of individual pages are encoded in Aldus/Microsoft 5 NIC
533	__ z v.78-81(1996-1999) a Also available as electronic reproduction. b [Chicago] : c University of Chicago Library, d [2006] 5 ICU
538	__ z v.50-77(1968-1995) a Master and use copy. Digital Master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. u http://purl.oclc.org/DLF/benchrepro0212 5 NIC
538	__ z v.78-81(1996-1999) a Master and use copy. Digital Master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. u http://purl.oclc.org/DLF/benchrepro0212 5 ICU
583	__ z v.50-77(1968-1995) a digitized c 2001 f CHLA h Cornell University l committed to preserve z Digitization funded by Cornell University Class of 1956. Title selected from the series Literature of the agricultural sciences for the Core historical literature of agriculture. 2 pda 5 NIC
583	1_ z v.78-81(1996-1999) a digitized c 2006 h University of Chicago Library l committed to preserve 2 pda 5 ICU
650	_0 a Agriculture x Economic aspects v Periodicals.
650	_0 a Agriculture v Periodicals.
710	2_ a American Agricultural Economics Association.
710	22 a American Agricultural Economics Association. t Proceedings.
710	22 a American Agricultural Economics Association. t Directory.
776	00 t American journal of agricultural economics (CD-ROM) x 1091-4234 w (DLC)sn 96004817 w (OCoLC)35644984
780	00 t Journal of farm economics x 1071-1031 w (DLC)sn 88024113 w (OCoLC)1643730
856	41 z v.50-77(1968-1995) u http://resolver.library.cornell.edu/misc/5032826 x http://chla.library.cornell.edu/c/chla/browse/title/5032826.html z Connect to full text.
856	41 z v.78-81(1996-1999) u http://www.lib.uchicago.edu/~rd13/PretendSerial.html

9.9 Example 9: Serial - Separate record approach Aggregator neutral electronic version record

006	m d
007	__ a c b r d c e n f u
007	__ a c b r d b e n g 001 h a i p j a k d l p
007	__ a c b r d b e n g 001 h a i p j a k d l a
010	__ a 2001214619
040	__ a NSD c NSD d OCLCQ d F#A d MUQ d OCLCQ d IUL d COO
012	__ l 1
019	__ a 46607346 a 50266198 a 68697394
022	0_ a 1533-8290 y 0002-1482
042	__ a lcd a dlr
130	0_ a Agricultural history (Online)
245	10 a Agricultural history h [electronic resource].
260	__ a Berkeley, CA : b University of California Press, c 1927-
310	__ a Quarterly, b 1928-
321	__ a Semiannual, b 1927
362	1_ a Print began with: Vol. 1, no. 1 (Jan. 1927).
500	__ a Description based on: Vol. 75, no. 1 (winter 2001); title from issue contents page (University of California Press Web site, viewed on Apr. 22, 2006).
500	__ a Latest issue consulted: Vol. 80, no. 1 (winter 2006).
506	0_ 3 v.1-39(1927-1965) f Unrestricted online access 2 star 5 NIC
506	0_ 3 v.40-49(1966-1975) f Unrestricted online access 2 star 5 ICU
530	__ a Also issued in print.
550	__ a Vols. for 1927- issued by: the Agricultural History Society; <, July 1977-> published for the Agricultural History Society by the University of California Press.
533	__ 3 v.1-39(1927-1965) a Electronic reproduction. b Ithaca, NY : c Cornell University Library, d 2001 f (Core historical literature of agriculture) 5 NIC
533	__ 3 v.40-49(1966-1975) a Electronic reproduction. b [Chicago] : c University of Chicago Library, d [2006] 5 ICU
538	__ 3 v.1-39(1927-1965) a Master and use copy. Digital Master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. u http://purl.oclc.org/DLF/benchrepro0212 5 NIC
538	__ 3 v.40-49(1966-1975) a Master and use copy. Digital Master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. u http://purl.oclc.org/DLF/benchrepro0212 5 ICU
583	1_ 3 v.1-39(1927-1965) a digitized c 2001 f CHLA h Cornell University l committed to preserve z Digitization funded by Cornell University Class of 1956. Title selected from the series Literature of the agricultural sciences for the Core historical literature of agriculture. 2 pda 5 NIC
583	1_ 3 v.40-49(1966-1975) a digitized c 2006 h University of Chicago Library l committed to preserve 2 pda 5 ICU
650	_0 a Agriculture x History v Periodicals.
650	_0 a Agriculture v Periodicals.
710	2_ a Agricultural History Society.
776	0_ t Agricultural history x 0002-1482 w (DLC) 33020319 w (OCoLC)1478539
830	_0 a Core historical literature of agriculture.
856	40 u http://caliber.ucpress.net/loi/ah
856	40 3 v.1-39(1927-1965) u http://resolver.library.cornell.edu/chla/5077685 x http://chla.library.cornell.edu/c/chla/browse/title/5077685.html z Connect to full text.
856	41 3 v.40-49(1966-1975) u http://www.lib.uchicago.edu/~rd13/PretendSerial.html
856	40 u http://firstsearch.oclc.org z Address for accessing the journal using authorization number and password through OCLC FirstSearch Electronic Collections Online
856	40 u http://firstsearch.oclc.org/journal=0002-1482;screen=info:ECOIP z Address for accessing the journal from an authorized IP address through OCLC FirstSearch Electronic Collections Online

10 Development Road Map

Future Development	MARC 21 Field/Subfield or Use of Elements	Notes
Precise Holdings	MARC 21 Format for Holdings Data	OCLC will investigate the use of holdings records to record detailed holdings. Currently, the 852 field is not retained in the master record and is considered local data.
Batch processing	583 Action Note (R) 856-40 Electronic Location and Access (R)	Availability and flexibility of batch input and output. In the future, with further investigation, if the digitization does not occur within a specified date range, OCLC may modify automatically and/or batch the "Intent to digitize" statements in field 583, or remove such statements if the intent date has passed and a related 856 field with indicators 40 exists.

11 Glossary

Term	Definition
Born digital	Digital objects that represent works created originally in electronic form only.
DBE	OCLC's Database Enrichment program. See the OCLC Cataloging Service User Guide for more information about the program, Chapter 4.
Digital Registry	See Registry of Digital Masters .
Digital reproductions	Digital objects that are optimally formatted and described with a view to their <i>quality</i> (functionality and use value), <i>persistence</i> (long-term access), and <i>interoperability</i> (e.g. across platforms and software environments). http://purl.oclc.org/DLF/benchrepro0212 .
Item	A document or set of documents in any physical form, published, issued, or treated as an entity, and as such forming the basis for a single bibliographic description. Anglo-American Cataloging Rules, 2 nd ed. 2002 revision.
MARBI	Machine-Readable Bibliographic Information – an American Library Association interdivisional committee: ALCTS (Association for Library Collections and Technical Services - http://www.ala.org/alcts); LITA (Library and Information Technology Association - http://www.ala.org/lita); RUSA (Reference and User Services Association - http://www.ala.org/rusa). Library of Congress Website (http://www.loc.gov/index.html).
Master copy	The digital object that most closely retains the significant attributes of the original. See also Digital reproductions .
OCLC WorldCat	OCLC database of bibliographic records.
RDM	See Registry of Digital Masters .
Registry	See Registry of Digital Masters .
Registry of Digital Masters	Contains information about the books and serial publications that libraries have digitized for electronic access or are preparing to digitize. Registry searchers could find out also in what format an item has been digitized, and under what terms it could be used. Additionally, the Registry would identify which institutions are taking responsibility for preserving originals of each digitized book or journal and which are seeing that digital copies are preserved and stay available. Digital Library Federation Website: http://www.diglib.org/dlfhomepage.htm .
Transform digitally	Copy, reformat, convert or enhance a digital file to another digital format.
Use copy	Accessible online and optimized to meet requirements defined locally or within a community. See also Digital reproductions .
WorldCat	See OCLC WorldCat .

12 Registry Requirements

In addition to typical cataloging standards⁹, these are requirements for creating Registry entries.

Type of Object	MARC 21 Field	Requirement	Comments
Born Digital Describe the digital born object.	007/00	M	c
	007/13	O	Use only if reformatted.
	042	M	dlr
	506	M	
	583	M	
	856	M	
Reproduction (separate record for the electronic resource only) Describe the original object with the reproduction described in 533 (see the guidelines section 5 for how to choose standard practice)	007/00	M	c
	007/11	O	
	007/13	M	
	042	M	dlr
	506	M	
	533	M	
	538	M	If applicable.
	583	M	
Reproduction (for the electronic resource only) Describe the reproduction with the original object described in 534 (see the guidelines section 5 for how to choose standard practice)	007/00	M	c
	007/11	O	007/11
	007/13	M	
	042	M	dlr
	506	M	
	534	M	
	538	M	If applicable.
	583	M	
Reproduction (single record for both the original and a digital reproduction) Describe the original object.	007/00	M	c
	007/11	O	007/11
	007/13	M	
	042	M	dlr

⁹ In addition to cataloging records that meet AACR2 level 1 description or a national equivalent.

Type of Object	MARC 21 Field	Requirement	Comments
	506	M	
	533	M	
	538	M	If applicable.
	583	M	May consider adding if you have information not covered by field 538.
	856	M	
Queuing Describe the intent to digitize an object.	007/00	M	c
	007/11	O	Add information if known.
	007/13	O	Add information if known.
	042	M	dlr
	506	M	
	533	M	Add information if known.
	538	M	Add information if known.
	583	M	
	856	O	Add information if known.

Key to abbreviations in the table

M = Mandatory
O = Optional

APPENDIX A – Registry Elements

This table is a summary of MARC 21 elements to be used to satisfy Registry elements¹⁰.

MARC 21 Field	Subfield or Use of Elements	Notes ¹¹
		Follow standard practices when creating new bibliographic records or modifying existing records, depending on the system/utility used.
007 Electronic Resource (R)	/00 Category of material	When field 007/00 contains code c, it contains special coded information about the physical characteristics of an electronic resource.
	c – Electronic resource	<i>Indicates that the category of material to which the item belongs is electronic resource (e.g., programs, data files, image files, digitized audio and video tapes, etc.), which usually consists of digitized machine-readable data, program code, etc. intended to be accessed, processed, or executed by a computer.</i>
	/11 Antecedent/Source	<i>Gives information about the source of a digital file important to the creation, use and management of digitally reformatted materials.</i>
	a – File reproduced from original	<i>Indicates that the content ... has been created by digitization of the original item.</i>
	b – File reproduced from microform	<i>Indicates that the content ... has been created by scanning from microform.</i>
	c – File reproduced from electronic resource	<i>Indicates that the electronic resource has been created or copied from an existing electronic resource (e.g., to generate new copies or derivative copies ...)</i>
	d – File reproduced from an intermediate (not microform)	<i>Indicates that the content ... has been created by reformatting/digitizing from an intermediate other than microform.</i>
	m – Mixed	<i>Indicates that the images ... have been created from mixed sources (portions scanned from original item, portions scanned from microfilm, etc.).</i>
	n – Not applicable	<i>Indicates that antecedent or source are not applicable to this electronic resource.</i>
	u – Unknown	<i>Indicates that the antecedent or source of this reformatted electronic resource is not known.</i>
	/13 Reformatting Quality	In the context of the Registry, the following 007/13 codes may be used to identify access or preservation elements in conjunction with fields 533, 583, and/or 856.

¹⁰ In addition to cataloging records that meet AACR2 level 1 description or a national equivalent.

¹¹ Texts in italics are quotes from MARC 21 Format for Bibliographic Data.

MARC 21 Field	Subfield or Use of Elements	Notes ¹¹
007 Electronic Resource (R) (cont.)	a – Access	<i>Indicates the electronic resource is of a quality that will support current, electronic access to the original item (reference use), but is not sufficient to serve as a preservation copy. Used for the "Use" copy.</i>
	p – Preservation	<i>Indicates the electronic resource was created via reformatting to help preserve the original item. The capture and storage techniques associated with preservation files ensure high-quality, long-term electronic resources that warrant long-term protection. Used for the "Master" copy.</i>
042 Authentication Code (NR)	\$a - Authentication code	\$a dlr – Registry of Digital Masters. ¹²
506 Restrictions on Access (R)		Use field 506 ¹³ for terms and conditions for restrictions imposed on access to the described materials. Alternatively, an additional 856 field may be used to indicate the URL/URN which provides a direct link between bibliographic records and addressable electronic files containing current information concerning restrictions imposed on access, use and/or reproduction of materials described in the records.
	1 st indicator # - No information provided 0 - No restrictions 1 - Restrictions apply	1 st indicator # - Indicates that no information is provided about whether the note states that materials are restricted or unrestricted 0 - Indicates that the field affirms an absence of access restrictions. 1 - Indicates that the field defines access restrictions to some or all of the material described.
	\$a Terms governing access (NR)	Identifies legal, physical, or procedural restrictions imposed on individuals wishing to see the described materials.
	\$f Standardized terminology for access restrictions (R) NOTE: Use of this subfield while approved by MARBI has not yet officially been announced or implemented by the Library of Congress.	Contains data from a standardized list of terms indicating the level or type of restriction. Recommendation: use \$f whether or not there are any restrictions. A list of terminology, <i>Standardized Terminology for Access Restriction</i> , is available at http://purl.oclc.org/NET/506Vocabulary , such as Online access with authorization .
	\$u Uniform Resource Identifier (R)	Contains the Uniform Resource Identifier (URI), for example a URL or URN, which provides electronic access data in a standard syntax.

¹² Referred to as a "persistent identifier" in D. Flecker's Registry functional requirements documents, December 2001. All full or higher users may add field 042 with "dlr" in WorldCat with the exception of authenticated serial records.

¹³ DBE allows the user to add a 506 or 538 field if not already present.

MARC 21 Field	Subfield or Use of Elements	Notes ¹¹
506 Restrictions on Access (R) (cont.)	\$2 Source of term (NR) NOTE: Use of this subfield while approved by MARBI has not yet officially been announced or implemented by the Library of Congress.	\$2 star <i>Contains a MARC code that identifies the source of the term used to record the restriction in subfield \$f. The source of the MARC code is <u>MARC Code List for Relators, Sources, Description Conventions</u>. If different sources are recorded, separate fields should be used.</i>
	\$3 Materials specified (NR)	<i>Contains information that indicates the part of the described materials to which the field applies. Contains a note relating to the electronic location of the source identified in the field. Indicate whether master and/or use copy.</i>
533 Reproduction Note (R)		<i>Contains information that describes an item that is a reproduction of original material. The original item is described in the main portion of the bibliographic record and data relevant to the reproduction are given as a note in field 533 when they differ from the information describing the original.</i> May also be used in conjunction with field 856 \$3 pointer to external "detailed holdings".
	\$a Type of reproduction (NR)	<i>Contains the introductory phrase which identifies the type of reproduction being described.</i>
	\$b Place of reproduction (R)	<i>Contains the name of the place where the reproduction was made.</i>
	\$c Agency responsible for reproduction (R)	<i>Contains the agency responsible for the reproduction.</i>
	\$d Date of reproduction (NR)	<i>Contains the date when the reproduction was made. Supply an estimated year or range of years if the exact year is unknown, for example, yyyy or yyyy-yyyy.</i>
	\$e Physical description of reproduction (NR)	<i>Contains any physical description information about the reproduction. It normally contains the number of physical pieces and the dimensions of the reproduction.</i>
	\$m Dates and/or sequential designation of issues reproduced (R)	<i>Contains the sequential designation and/or dates of publication of the original issues that have been reproduced, such as Vol. 1, no. 1 (Apr. 1983)-v. 1, no. 3 (June 1983). Use either \$m or \$3 to record the designation. \$3 is the preferred method.</i>
	\$n Note about reproduction (R)	<i>Contains a note pertaining to the reproduction. Extent of item, such as \$n issues for 1854-1856 on reel with: Journal of the American Temperance Union and the New York prohibitionist, v. 21, no. 7 (July 1857)-v. 24 (1860).</i>
	\$3 Materials specified (NR)	<i>Contains information that indicates the part of the described material to which the field applies, such as v. 1-39 (1927-1965). Use either \$m or \$3 to record the designation. \$3 is the preferred method.</i>

MARC 21 Field	Subfield or Use of Elements	Notes ¹¹
534 Original Version Note (R)		<p><i>Descriptive data for an original item when the main portion of the bibliographic record describes a reproduction of that item and the data differ. Details relevant to the original are given in field 534.</i></p> <p>Recommendation: when describing the reproduction, preferred usage is field 533 over field 534 with the body of the record describing the original.</p>
538 System Details Note (R)		<p><i>Contains system information about an item. Describes the technical details about the electronic resource or may link to a statement about technical details.</i></p> <p>Note: if use and master copy are the same, the information should be repeated.</p>
	\$a System details note (NR)	<p>Contains system information about an item.</p> <p>Recommendation: subfield \$a should include the phrase "Use copy", "Master copy", or "Master and use copy".</p>
	\$u Uniform Resource Identifier (R)	<p><i>Contains the Uniform Resource Identifier (URI) which provides electronic access data in a standard syntax.</i></p>
583 Action Note (R)		<p><i>Contains information about processing and reference actions ... also used to record information about preservation action relating to an item Standard Terminology may be used and the authority for the terminology may be indicated in subfield \$2.¹⁴</i></p> <p>For those using the field to record digitization and preservation activities, a standardized list of actions, Preservation & Digitization Actions: Terminology for MARC 21 Field 583.pdf <http://www.loc.gov/marc/bibliographic/pda.pdf>, is available. Record actions such as "will transform digitally" and "transformed digitally".</p>
	<p>1st indicator - Privacy</p> <p># - no information provided</p> <p>0 - Private</p> <p>1 - Not private</p>	<p><i>Contains a value that specifies whether the contents of the field are private or not. The state of being private includes information that institutions do not want to display to the public.</i></p> <p># - Indicates that no information is provided as to the privacy of the field contents.</p> <p>0 – Indicates that the field contains private information.</p> <p>1 – Indicates that there is no private information in the field.</p>

¹⁴ OCLC's Database Enrichment (DBE) program allows all full or higher cataloging users to add and/or modify field 583 and replace the bibliographic record. This field displays to any user; formerly, it displayed only to the inputting institution or when locked by a user.

MARC 21 Field	Subfield or Use of Elements	Notes ¹¹
583 Action Note (R) (cont.)	\$a Action (NR)	<i>Refers to any action taken with respect to the described materials ... For preservation activities, this subfield contains a description of the action ... Standardized terminology descriptive of the action used for actions intended or completed; thus "transformed digitally" or "will digitize". Not required for born digital materials.</i>
	\$h Jurisdiction (R)	<i>Contains the name of a person, an institution, or a position or function within an institution, in whom or in which responsibility for an action is vested. Use \$h to inscribe the archiving repository.</i>
	\$i Method of action (R)	<i>Refers to the means or technique by which an action was performed. Use \$i for more specific information about both intended and completed actions, e.g., "OCR" or "textmarkup".</i> Recommendation: do not use when describing digital materials.
	\$l Status (R)	<i>Contains the condition or state of the described materials, sometimes but not always resulting from an action ... For preservation activities, this subfield may contain information about the condition of the item ... May be taken from a list of controlled vocabulary.</i> Recommendation: use the phrase committed to preserve .
	\$n Extent (R)	<i>Contains the extent, defined as the number of items involved.</i>
	\$o Type of unit (R)	<i>Contains the type of unit, defined as the name of the unit of measurement.</i>
	\$u Uniform Resource Identifier (R)	<i>Contains the Uniform Resource Identifier (URI) ... which provides electronic access data in a standard syntax ... used to record the location of external or supplemental information accessible electronically.</i>
	\$z Public Note (R)	<i>Contains a note pertaining to an action on an item that is displayed to the public.</i>
	\$2 Source of term (NR)	\$2 - pda <i>Contains a MARC code that identifies the source of the term used to record the action information. The source of the MARC code is <u>MARC Code Lists for Relators, Sources, Description Conventions</u> ... If different sources are recorded, separate fields should be used.</i>
	\$3 Materials specified (NR)	<i>Contains information that indicates the part of the described material to which the field applies.</i>
\$5 Institution to which field applies (NR)	<i>Contains the MARC code of the institution or organization that holds the copy to which the data in the field applies. Sources for codes are the <u>MARC Code List for Organizations and Symbols</u> and <u>Interlibrary Loan Policies in Canada</u>.</i>	

MARC 21 Field	Subfield or Use of Elements	Notes ¹¹
856 Electronic Location and Access (R)		<i>Contains the information needed to locate and access an electronic resource. Manually add or update field 856 with URL of digitized object. May use as a link to detailed holdings information at the institution level. May be used in conjunction with field 533 subfields \$m and \$n.</i>
	1 st indicator 4 - HTTP	<i>Indicates that access to the electronic resource is through the Hypertext Transfer Protocol (HTTP).</i>
	2 nd indicator 0 – Resource 1 – Version of resource	<i>Indicates that the electronic location in field 856 is for the same resource described by the record as a whole.</i> 0 – use for separate record approach. 1 – use for single record approach.
	\$u Uniform Resource Identifier (R)	<i>Contains the Uniform Resource Identifier (URI) which provides electronic access data in a standard syntax.</i>
	\$z Public note (R)	<i>Contains a note relating to the electronic location of the source identified in the field ... written in a form that is adequate or intended for public display. A textual representation of the "extent" of the use copy of an e-serial.</i>
	\$3 Materials specified (NR)	<i>Contains information that specifies the part of the described materials to which the field applies.</i> Recommendation: subfield \$3 include the phrase, " Detailed holdings: " Note: Indicate master and/or use copy.

APPENDIX B – Workflows

Library of Congress: use of existing single record.

LC has contributed to the Registry with some American Memory collections of digitized. These records will be single records that describe both the original and the digitized versions.

LC workflow for Registry contributions

LC will use the official distributed MARC records from the ILS (i.e. the cataloging for the original) and add fields for the Registry as follows. Note that these records already have 856 links to the digital and have served as both a record for the original and the digital.

Select records by collection using local field

Add extended 007 with the following:

007/11 (Antecedent/source) by collection as appropriate, e.g. from original (optional for Registry)

007/13 = p (preservation)

Add 042 = dlr

Add 506 = \$a [add access conditions as appropriate for collection]

Note that 506 \$f will be used with \$2=star in the future with controlled text when this subfield is available.

Add 533 \$a Also available as electronic reproduction \$b Washington, D.C. \$c Library of Congress

Add 538 \$a Master and use digital copies also available. \$a with a link to a description of the digitization process by collection when these statements are available; these will moved to 538 \$u once that subfield is defined in LC's ILS.

Delete 530 (if applicable)

Add 583 \$a digitized \$c [date if available] \$h Library of Congress \$l committed to preserve \$2 pda \$5 DLC

The records will then go out in LC's normal distribution.

The following is an example (not a complete record). What's in red [bold] gets added. This doesn't include the link to the description of the digitization process.

Sample LC record (single record approach)

001 6788737
005 20040224133823.0
007 cr |||||a|p
008 750915s1833 pau 000 0 eng
note that 008 reflects the original
010 |a 02001704
035 |a(OCOLC)1625623
040 |aDLC|cFM|dDLC
042 |adlr
050 00|aE165|b.A38
082 |a917
100 1 |aAlexander, James Edward,|cSir,|d1803-1885.
245 10|aTransatlantic sketches,|bcomprising visits to the most interesting scenes in North and South America, and the West Indies. With notes on negro slavery and Canadian emigration.|cBy Capt. J. E. Alexander ...
260 |aPhiladelphia,|bKey and Biddle,|c1833.
300 |avii, [9]-378 p.|c25 cm.
500 |aThe author visited British Guiana, Barbados, Tobago, Trinidad, Grenada, St. Vincents, Jamaica, and Cuba; thence up the Mississippi through Canada and the Eastern United States.
506 |fUnrestricted online access |2star
530 |aAlso available in digital form on the Library of Congress Web site.
533 |aAlso available as electronic reproduction |bWashington, D.C. |cLibrary of Congress.
538 |aMaster and use digital copies also available on the Library of Congress Web site. Technical details on the digital scanning are available at |uhttp://memory.loc.gov/ammem/lhtnhtml/lhtnbuild.html
583 |adigitized |c[date if available] |h[institution name] |lcommitted to preserve |5DLC
651 0|aUnited States|xDescription and travel.
651 0|aGuyana|xDescription and travel.
651 0|aWest Indies, British|xDescription and travel.
651 0|aCuba|xDescription and travel.
651 0|aCanada|xDescription and travel.
856 41|dlhbtn|f01704|qs|uhttp://hdl.loc.gov/loc.gdc/lhbtn.01704

Cornell University Library scenario for contributing to the Registry of Digital Masters. September 20, 2005.

CUL has made its first contribution to the Registry with the digital collections Core historical literature of agriculture (CHLA) and Home economics archive: research, tradition, history (HEARTH). These gather together digitized versions of print resources. Each record describes the digitized version.

Basic procedure

1. Extracted records from the local catalog.
2. Using a script and a spec for batch processing, edited records for collection-level normalization and to bring them into compliance with Registry guidelines.
3. Manually edited records containing errors discovered after batch process.
4. Sent file of updated bibliographic records to OCLC.
5. Reloaded updated bibliographic records into local database.

Editing of the records (Step 2)

The fields required by the Registry for minimal compliance can, for the purposes of this project, be divided into the following groups:

- 1) fields altogether absent from the original records and which were subsequently added to them (042, 583);
- 2) fields absent from a relatively few original records and which were added manually (533);
- 2) fields that appeared in the original records but not in all the instances or uses required (007 for use copy, 538);
- 3) fields that appeared in the original records but not necessarily with Registry-approved values (007/11 and 007/13 for master copy)
- 4) fields that appeared in the original records and which required no changes whatever (856).

The Registry-specific part of the metadata for the completed records looks as follows.

007/11 = a [File reproduced from original] – *preservation copy*

007/11 = a [File reproduced from original] – *use copy*

007/13 = p [preservation] – *preservation copy*

007/13 = a [access] – *use copy*

042 |a dlr

506 |3 [Master and/or use copy] |f [access] |2 star

533 |a Electronic reproduction. |b Ithaca, NY : |c Cornell University Library, |d [year]. |e [no. of image files]

538 |a Master and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. |u <http://purl.oclc.org/DLF/benchrepro0212>

583 1|a digitized \$c [year] \$f [project name] \$h Cornell University \$l committed to preserve \$2 pda \$5NIC

856 40|u [http://resolver.library.cornell.edu/chla/\[digit string\]](http://resolver.library.cornell.edu/chla/[digit string]) (usually with subfield x and/or z)
or

856 40|u [http://resolver.library.cornell.edu/hoec/\[digit string\]](http://resolver.library.cornell.edu/hoec/[digit string]) (usually with subfield x and/or z)

007

The 007 for the preservation copy was found in a relatively few records to contain values that inaccurately or insufficiently described the digitized version. Some of these records also lacked the proper Registry value for 007/11 or 007/13.

One characteristically deficient 007 looked this way.

007	cr un##### (# = blank for Obsolete Code or Value not Set)
-----	---

This and any similarly deficient 007 was normalized as follows.

007	cr_bn_001ap bp
-----	-----------------------

The additional 007 for the use copy looks as follows.

007	cr_bn_001ap aba
-----	------------------------

533

The 533 presented here is the most generic. Subfield a is the sole constant. Subfield b may be repeated with a different value. Subfield c may appear basically as here but with greater detail - "Cornell University, A.R. Mann Library". It may also be repeated with a different value. If the 533 was added belatedly, which on rare occasions it was, it may or may not have a subfield e.

583

The only optional subfields CUL is using for this project are \$f and \$5. \$f contains **CHLA** or **HEARTH**, as appropriate.

Examples

Note: | = \$

001: 2688449
 005: 20050127091243.0
 006: m d
 007: cr bn 001apadp
 007: cr bn 001apada
 008: 890509s1927 ilu s 001 0 eng d
 035: \$a(NIC)notisANH0474
 040: \$aNIC\$cNIC\$dNIC
 042: \$adlr
 043: \$an-us---
 100: 1 \$aTeele, R. P.\$q(Ray Palmer),\$d1868-1927.
 245: 14\$aThe economics of land reclamation in the United States
 \$h[electronic resource] / \$cby Ray P. Teele.
 256: \$aComputer data (357 image files)
 260: \$aChicago ;\$aLondon :\$bA. W. Shaw,\$c1927.
 516: \$aAvailable as JPEG files, PDF files, and HTML text.
 530: \$aAlso available in print and in microfilm.
 538: \$aMode of access: World Wide Web.
 538: \$aFiles for the images of individual pages are encoded in
 Aldus/Microsoft TIFF Version 5.0 using facsimile-compatible CCITT
 Group 4 compression.
 538: \$aSystem requirements: World Wide Web browser, Internet
 connectivity, and Adobe Acrobat Reader.
 500: \$aDigitization funded by NEH digital to microfilm conversion
 project. Title selected from the series Literature of the agricultural
 sciences for the Core historical literature of agriculture, Agricultural
 economics and rural sociology.
 500: \$aIncludes index.
 506: \$3Use copy\$aAccess available to account holders only.\$f Online access with authorization\$2star
 533: \$aElectronic reproduction.\$bIthaca, NY :\$cCornell University Library,
 \$d1994.\$e357 image files.
 538: \$aMaster and use copy. Digital master created according to Benchmark
 for Faithful Digital Reproductions of Monographs and Serials, Version
 1. Digital Library Federation, December 2002.
 \$uhttp://purl.oclc.org/DLF/benchrepro0212
 583: 1 \$adigitized\$c1994\$fCHLA\$hCornell University\$lcommitted to
 preserve\$2pda\$5NIC
 650: 0\$aReclamation of land\$zUnited States.
 776: 0 \$cPrint\$w(Voyager)1478633
 776: 0 \$cMicrofilm\$w(Voyager)2688597
 830: 0\$aCore historical literature of agriculture.\$pAgricultural economics
 and rural sociology.
 856: 40\$uhttp://resolver.library.cornell.edu/chla/2688449\$zConnect to full
 text
 899: 0\$aCHLAg
 905: \$a19981008120000.0
 906: \$awo
 948: \$ac:nlb
 948: 1 \$a20001128\$bc\$dmann01\$emann\$fe\$h?
 948: 2 \$a20040903\$bb\$dmann21\$emann\$fe\$h?

001: 4086871
005: 20030822090649.0
006: m d
007: cr bn 001apadp
007: cr bn 001apadp
008: 890628s1894 iaua sb 000 0 eng d
040: \$aNIC\$cNIC\$dNIC
042: \$adlr
050: 4\$ALB1162
100: 10\$ABlow, Susan E.\$q(Susan Elizabeth),\$d1843-1916.
245: 10\$ASymbolic education\$h[electronic resource] :\$ba commentary on Froebel's "Mother play" /\$cby Susan E. Blow.
260: 0 \$ANew York :\$bD. Appleton,\$cc1894.
490: 1 \$AInternational education series ;\$vno. 26
440: 0\$AHome economics archive--research, tradition and history
538: \$AMode of access: World Wide Web.
538: \$AFiles for the images of individual pages are encoded in Aldus/Microsoft TIFF Version 6.0 using facsimile-compatible CCITT Group 4 Compression.
500: \$ADigitization funded by Institute of Museum and Library Services, 2001. Preserving the Core historical literature of home economics before 1950.
504: \$AIncludes bibliographical references.
506: \$ANo restrictions on access copy.\$fUnrestricted online access\$2star.
533: \$AElectronic reproduction.\$bIthaca, N.Y. :\$cCornell University, A.R. Mann Library, Preservation Unit ;\$bMontreal, Quebec :\$cTrigonix Inc., \$d2001.\$e286 image files.
538: \$AMaster and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002.
\$uhttp://purl.oclc.org/DLF/benchrepro0212
583: 1 \$Adigitized\$c2001\$fHEARTH\$hCornell University\$lcommitted to preserve\$2pda\$5NIC
650: 0\$AKindergarten.
600: 10\$AFröbel, Friedrich,\$d1782-1852.
830: 0\$AInternational education series (D. Appleton and Company) ;\$vno. 26.
856: 40\$uhttp://resolver.library.cornell.edu/hoec/4086871\$xhttp://hearth.library.cornell.edu/cgi/t/text/text-idx?c=hearth;idno=4086871
899: 0\$AHomeEcAr
948: 1 \$a20020320\$bodmann03\$emann\$fe\$h?
948: 2 \$a20030417\$bbodmann03\$emann\$fe\$h?

Possible workflow for institutions that use single records for both original and digital: create special records for contribution that reflect only the digitized.

Environment: Some institutions may have a single record that covers both the original and the digitized with an 856 link for the digitized version. If an institution does not want to add the required fields to reflect the digital on the same record, it could follow this alternative approach. Portions of the record are extracted and fields added that are required by the Registry so that the record for the Registry reflects the digitized version only.

In contributing to the Registry, the record must be loaded into WorldCat, since that is the way that OCLC pulls these records. Thus, WorldCat will contain two records: the original record that covers both the analog and the digital and this “massaged” record created solely for contribution to the Registry.

Workflow:

1. Identify records in the local catalog for a category of material.
2. Export these as MARC.
3. Use a script in MARCEdit (already developed) to add/change/delete fields as noted below (MARCEdit is available free and must be on the computer used to be able to apply the script. The script may be supplied upon request).

Fields:

001. Change the control number if needed so that it isn't identical to that of the original record.

003. Add 003 to identify whose control number it is.

005. Update to current date

007/11 (Antecedent/source): (if desirable and known) add a value depending on what the item was digitized from

007/13 = p (preservation)

008/23 = s (electronic)

042 = dlr (may add \$a to an existing 042 in some cases)

245 Add \$h [electronic resource] to follow \$a np (usually just \$a will be present)

506 = \$f[appropriate access statement] \$2star

533 = \$aElectronic reproduction. \$b [place] : \$c [institution]

538 = \$aMaster and use copy. \$u[URL for description of digitization process if available]

583 = \$adigitized \$c[date if available] \$h[institution name] \$lcommitted to preserve \$2pda \$5[institution MARC organization code]

776 = \$coriginal \$w[control number of original]

856 = \$3 \$u (as appropriate); change 2nd indicator from 1 to 0.

4. Strip the following: local variable fields, 035s from original record; existing 530s, existing 007s (would either be an electronic resource 007 that isn't as rich as the one we would provide for the Registry, or for the original manifestation).

5. Maintenance issue: There is the question of maintenance if the record for the original gets modified. The institution may need to keep track of what it has sent in this manner. That would involve working out a procedure for also updating the extracted record for the digitized item in these cases.

Last updates May 23, 2007.