

Metadata Guidelines

Arizona State Library, Archives and Public Records
Metadata Architecture Committee Recommendations

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Introduction

The Arizona State Library, Archives and Public Records established the Metadata Committee to address the challenges of uniform application of metadata standards in a collaborative digital project. The Metadata Committee has defined the following metadata recommendations based on the *Western States Dublin Core Metadata Best Practices*.

Purpose

The purpose of this effort was to create metadata standards to ensure quality control, enable search precision and recall, and facilitate inter-institutional interoperability of collections housed within a centralized digital repository.

Like the *Western States Dublin Core Metadata Best Practices*, these guidelines are intended to aid in providing a rich, complete description of digital resources, whether the resources are “born digital” or are digitally derived from an existing physical object.

Scope

These guidelines seek to address the needs of a diverse audience of cultural institutions, including libraries, archives, museums, historical societies and other cultural heritage organizations. This document is intended to accommodate an array of backgrounds, experience and metadata skill levels of those charged with creating metadata records, including catalogers, curators, archivists, librarians, Web site developers, database administrators, volunteers and anyone interested in digitizing cultural heritage materials.

Use of These Guidelines

Specific recommendations related to the elements below are detailed in the following pages. Asterisks indicate required metadata elements for documents and images. Remaining elements are optional; however, richer more complete metadata increases the likelihood that users will locate the desired digital resource.

1. Title*
2. Creator* (For oral histories, see **Interviewee**)
3. Subject*
4. Browse Topic†
5. Description*
6. Language
7. Contributor (For oral histories, see **Interviewer**)
8. Publisher
9. Type*
10. Material Collection
11. Material Subcollection
12. Geographic Coverage
13. Acquisition Note
14. Exhibit
15. Rights Management*
16. Date Original*
17. Time Period†
18. Original Format*
19. Source Identifier
20. Location
21. Digital Identifier*
22. Date Digital†
23. Digital Format*
24. Digitization Specifications†
25. Serial Information
26. Repository*
27. Digitization Technician
28. Full Text / Transcript #
29. Interviewee^
30. Interviewer^
31. File Size§

*required

†recommended

recommended for audio /video files and documents

^ required for oral histories

§ required for audio / video files

Terminology

Some terms may be used interchangeably such as *controlled vocabulary*, *subject heading list* and *thesaurus*. A *controlled vocabulary* is a limited set of terms and phrases used as headings, in indexes and as access points in catalogs.¹ When possible, the term *digital resource* has been used to refer to the digital derivative of the existing physical object. A *born digital resource* (a type of *digital resource*) is a resource that was created in an electronic format. A document originally created using a word-processor is an example of a born digital resource.² In contrast, a *physical object* (used interchangeably with *original object*) refers to an original source object that was created in a nondigital format that could be subsequently digitized.³ *Element* refers to a metadata field. *Interoperability* refers to the ability of a system or a product to work with other systems or products.

What is Metadata and Why is it Important?

The *Western States Dublin Core Metadata Best Practices* defines metadata as “a modern term for the bibliographic information that libraries traditionally entered into their catalogs or databases or registration information on collections that museums have entered into their systems; however the term *metadata* is most commonly used to refer to descriptive information about digital resources.”

Metadata is a critical component, and a key consideration, when developing and managing a digitization effort. Metadata should be created and associated with the digital resource to support the discovery, use, management, reusability, and sustainability of the resource. Metadata facilitates search retrieval, navigation, display, rights management, access and migration.

Metadata Creation

Several general principles should guide good metadata creation practices according to the *Framework of Guidance for Building Good Digital Collections and Using Metadata* found on the NISO website (www.niso.org). These guiding principles are summarized below.

In short, good metadata:

- should be appropriate to the materials of the collection, users of the collection, and intended, current and likely use of the digital resource.
- uses standard controlled vocabularies to reflect the what, where, when and who of the content. A controlled vocabulary is a list of accepted terms (called descriptors) used to describe a resource, which aids in organizing and retrieving similarly themed items.
- includes a clear statement of the conditions and terms of use for the digital resource.
- should be authoritative and verifiable. Metadata records are “objects” themselves and should have the qualities of archivability, persistence and unique identification.
- supports *interoperability* (that is, supports seamless compatibility between one system or product with other systems or products).
- helps to ensure the long-term management of the digital resources in collections.

^{1, 2, 3} Pearce-Moses, Richard. 2005. *A Glossary of Archival and Records Terminology*. Chicago: Society of American Archivists.

Element Attributes

The following are attributes that provide information about each of the elements.

- **Corresponding DC field**
Information about an equivalent Dublin Core metadata field. (See **APPENDIX G: Glossary** for more information on Dublin Core). This information is helpful when creating crosswalks. *Crosswalks* are processes and procedures that translate one metadata format into another metadata format.
- **Definition**
A statement that represents the concept and essential nature of the element. Definitions have been based on the *Western States Dublin Core Metadata Best Practices v2.0 (January, 2005)*, but have been edited to reflect the needs and requirements of the Metadata Architecture Committee at the Arizona State Library, Archives and Public Records.
- **Required**
Specifies if the element is mandatory. Elements that are labeled “required” must contain metadata. Exceptions may be made for legacy metadata.
- **Controlled Vocabulary**
 - Utilizing terminology from a controlled vocabulary can improve the quality of search results through consistency and reduction of errors. The best practice is to select terms from controlled vocabularies, thesauri, and subject heading lists for completion of the subject elements, rather than just using uncontrolled keywords. Refer to the **Subject** element (p.15) for a list of accepted controlled vocabularies.
 - There are two forms of controlled vocabulary: internally controlled vocabulary and externally controlled vocabulary
 - **Internally controlled vocabulary:** The Acquisition Station (CONTENTdm) software package controls the available terms. Suggested additions to the existing vocabulary are subject to approval of project administrators.
 - **Externally controlled vocabulary:** Users should consult published thesauri, dictionaries, etc., for acceptable terms. See each element for suggestions of externally controlled vocabularies.
 - Other non-controlled terms or keywords that identify the resource with some precision can be added to a record to enhance retrieval and discovery, especially in cases where such terms are too new to be included in controlled vocabularies. These non-controlled terms should be entered in the **Description** element.
- **Input Guidelines**
Provides recommendations on entering and encoding values for the elements
- **Comments**
Provides additional information about the application of the element for metadata entry
- **Examples**
Instances of how the element is used

Input Guidelines

Metadata creators should follow the general grammatical rules of the language involved when entering in descriptive information about resources. In addition, it may be useful to consult the latest version of the *Anglo-American Cataloging Rules (AACR2)*, *Describing Archives: A Content Standard (DACCS)*, or *Cataloging Cultural Objects (CCO)* for information on general rules and guidelines for data entry. The *Input Guidelines* attribute provides recommendations on entering and encoding values for the elements.

Some metadata may be for use only within your organization, or may be included in the metadata records for functional or administrative purposes only. Metadata fields *not* intended for public viewing can be hidden as a feature the Acquisition Station (CONTENTdm) system software. Recommendations for “hiding” particular

metadata fields have been noted in the relevant sections, including **Location** and **Digitization Technician**. Institutions may hide additional fields as desired.

General input guidelines from *Western States Dublin Core Metadata Best Practices* have been summarized below:

- **Punctuation**
Avoid ending punctuation unless it is part of the content of the resource.
- **Abbreviations**
The following abbreviations are allowed: common or accepted abbreviations (such as “St.” for “Saint”); designations of function (such as “ed.” for “Editor”); terms used with dates (b. or fl.); and distinguishing terms added to names of persons, if they are abbreviated on the item (such as “Mrs.” or “Jr.”). Abbreviations should not be used if it makes the record unclear. When in doubt, spell out the abbreviation. For more abbreviations and information, refer to the AACR2 Abbreviations list at <http://www.library.yale.edu/cataloging/tools.htm>
- **Capitalization**
In general, capitalize the first word (of a title, for example) and proper names (place, personal and organizational names). Capitalize content in the description element according to normal rules of writing. Acronyms should be entered as capital letters.
- **Initial Articles**
Omit initial articles at the beginning of the title such as: *the*, *a*, *an* and foreign language equivalents, unless the article is a part of a proper name.
- **Character Encoding**
Input non-standard characters and diacritics as needed so that they display correctly. This will aid in effective retrieval. For example, input a character with a tilde as it would normally appear within a word, e.g. cañon.

Legacy Metadata

Metadata created prior to this *Best Practices* document may conform to other guidelines and specifications. It may be difficult to revise or edit large amounts of “legacy metadata” to follow the practices set forth in the following pages. In this situation, make reasonable efforts to retrofit existing metadata into the fields, following the Arizona State Library, Archives and Public Records guidelines.

Other resources

Please consult the following resources to learn more about metadata description and standards. Refer to **APPENDIX H: Additional Resources and Further Reading** for a complete listing of resources.

Dublin Core Metadata Standard

<http://dublincore.org/>

A Framework of Guidance for Building Good Digital Collections

<http://www.niso.org/framework/Framework2.html>

Understanding Metadata (NISO Press)

<http://www.niso.org/standards/resources/UnderstandingMetadata.pdf>

Western States Dublin Core Best Practices – Version 2.0, January 2005

<http://www.cdphheritage.org/resource/metadata/documents/WSDCMBP.pdf>

About this document

The metadata standards were drafted in July 2005 and version 1.0 was issued September 2005. Version 2.0 was issued August 2006. Version 2.5 contains updated phone contact information.

About the Arizona State Library, Archives and Public Records

The Arizona State Library, Archives and Public Records serves the information needs of Arizona citizens as authorized in Arizona Revised Statutes §41-1331 through §41-1352. Through its divisions, the Agency provides access to unique historical and contemporary resources:

- Archives of historical records in Arizona.
- Library extension assistance to public libraries.
- Library for the visually and physically disabled.
- Museum on state government history and people of the state.
- Public records management program.
- Research and law library.

Agency staff provides reference services and assistance with in-depth research in subject areas of law, government, genealogy and Arizona history. Additionally, Arizona State Library, Archives and Public Records offers consultant services to public libraries to strengthen county and local library services, and to government agencies of the cities, counties and state to assist in the management and preservation of official records. The Arizona State Library administers and monitors state and federal grants for public libraries and other authorized services. Additionally, the Agency offers special library and information services for the visually and physically disabled and institutionalized residents of Arizona.

Contact Information

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Ph: 602.926.4035
Email: services@lib.az.us
<http://www.lib.az.us>

Metadata Elements

I. TITLE

Corresponding DC field: Title

Definition: The name of the object, such as a title of a book or painting. Typically a title will be a name by which the resource is formally known.

Required: Yes

Controlled Vocabulary: No

Input Guidelines:

- Capitalize the first word of the title and proper names. Do not include articles (the, a, an, or their foreign equivalents) at the beginning of a title, unless the article is a part of a proper name.
- Transcribe the title from the resource itself, such as using a caption from a photograph or a title on a map.
- **For artifacts or “born-digital” objects** without formal titles, create a short, descriptive title sufficient to identify the resource, such as “Harvey girls photo”.
- **For oral histories**, enter the phrase “Oral history interview with” followed by the interviewee name and date of interview. Date should be a four digit year, followed by month and day.
- **For cartographic materials:** In parenthesis, include the date of the cartographic material after the title.

Comments:

- Accession numbers, call numbers, or other identification schemes about the original object should be entered in the **Source Identifier** element.
- File names or other unique identifying information about the digital resource should be entered in the **Digital Identifier** element.

Examples:

Title	Comments
Sense and sensibility	<i>[Title of book]</i>
Dia de la tierra	<i>[Title from a poster]</i>
Summer cabin	<i>[Handwritten caption from a photograph]</i>
Buffalo	<i>[Title from the music score “The Buffalo.” Note that the initial article has been removed.]</i>
Plat-of-the-Town of Grand Junction, Gunnison County, Colorado (1950)	<i>[Title on a map]</i>
George W. P. Hunt suffrage speech	<i>[Unpublished document]</i>
Silver teapot	<i>[A teapot within a museum collection]</i>
Oral history interview with John Smith, 2000 July 26	<i>[Oral history]</i>

Element modified: 2006-08-30

2. CREATOR

Corresponding DC field: Creator

Definition: The name of the primary person or organization that produced the object, such as writer, photographer, artist or manufacturer. Examples of a Creator include a person, an organization, a service, authors of written documents, collectors of natural specimens or artifacts, organizations that generate archival collections, etc.

Required: Yes

Controlled Vocabulary: No; Optional Authority List: Library of Congress Name Authority (<http://authorities.loc.gov/>).

Input Guidelines:

- Enter personal names in inverted form: Last name, First name Middle name or Initial. If it is not obvious how to invert or structure a name, use the name form given in an authority list or enter it as it would be in the country of origin.
- If there is doubt as to how to enter a name and the form of name cannot be verified in a controlled vocabulary, enter it as it appears and do not invert. For example: Sitting Bull.
- If the creator is unknown, enter the word “Unknown” in the **Creator** element
- Birth and death dates, if known, could be added, in accordance with authorized form of name when possible.
- Name authority information can be found at the Library of Congress Authority file at <http://authorities.loc.gov/>.
- Abbreviations are allowed if they are distinguishing terms added to names of persons and they are abbreviated on the item (such as “Mrs.” or “Jr.”). If in doubt, spell out the abbreviation.
- Abbreviations for designations of function (such as “ed.” for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at <http://www.library.yale.edu/cataloging/tools.htm>.
- Enter *primary creator* (the creator listed first on a work). Secondary authors, editors, etc. must be entered in the **Contributor** element.
- Enter corporate authors in full, direct form.
- **For oral histories**, enter information in the **Interviewee** element.

Comments: Input entities responsible for digitizing an existing resource in the **Digitizing Technician** element.

Examples:

Creator	Comments
Billy the Kid	<i>[Name is not inverted, according to authority files]</i>
Smith, Adam, 1723-1790	<i>[Birth and death dates are very important in order to distinguish between otherwise identical names.]</i>
Madonna, 1958-	<i>[Refers to the entertainer. This is the form given in the LC Authority record. Note the hyphen after the date to indicate that the individual is living.]</i>
Chavez de Aguilar, Maria Alicia.	<i>[Name is entered as it would in the country of origin]</i>
Fitzgerald, F. Scott.	<i>[Name of author with First Name as an initial]</i>
Unknown	<i>[Name of photographer is unknown]</i>
Crawford, Vicki L. (ed.)	<i>[Name of editor of an anthology of articles; additional editors listed in Contributors element]</i>
Arizona Dept. of Game and Fish	<i>[Name of corporate author]</i>

Element modified: 2006-08-30

3. SUBJECT

Corresponding DC field: Subject

Definition: What the content of the resource is about or what it is, expressed by headings, keywords, phrases, names, or other terms for significant people, places, and events; includes keywords and phrases that describe a topic of the resource.

Required: Yes

Controlled Vocabulary: Yes; Refer to list of externally controlled vocabularies below.

Input Guidelines:

- Separate multiple subject entries with a semicolon followed by a space. If the subject is a person or an organization, use the same form of name as specified in the **Creator** element.
- Dashes and/ or other punctuation are allowed.

Comments:

- This list includes a majority of the major thesauri in current use.
- Recommended best practice is to select a value from a controlled vocabulary or formal classification scheme. It is recommended that subject words and phrases come from established thesauri or discipline-related word lists. Established recommended schemes are provided in the *DCMI Dublin Core Metadata Terms* list (found at: <http://dublincore.org/documents/dcmi-terms/>).
- *Caution:* Before opting to use terms from a thesaurus other than those listed below, carefully consider if selected thesauri will be acceptable to any potential partners with whom you may share your records.
- Non-controlled terms or keywords that identify the resource with some precision can be added to a record to enhance retrieval and discovery, especially in cases where such terms are too new to be included in controlled vocabularies. These non-controlled terms should be entered in the **Description** element.

Other established thesauri or word lists include, but are not limited to:

Scheme Name	Definition
AASL	Asian American Studies Library subject headings
AAT	Art and Architecture Thesaurus http://www.getty.edu/research/conducting_research/vocabularies/aat/
AMG	Audiovisual Materials Glossary (AMG)
ATLA	Religion Indexes Thesaurus
CHT	Chicano Thesaurus for Indexing Chicano Materials
DDC	Dewey Decimal Classification http://www.oclc.org/dewey/
ERICD	Thesaurus of ERIC Descriptors http://www.ericfacility.net/extra/pub/thesearch.cfm
FAST	Faceted Application of Subject Terminology http://fast.oclc.org/
GEOREFT	GEORef Thesaurus
GMGPC	Thesaurus for Graphic Materials: TGM II, Genre and Physical Characteristic Terms http://www.loc.gov/rr/print/tgm2/
GSAFD	Guidelines on Subject Access to Individual Works of Fiction, Drama, etc.
LCC	Library of Congress Classification http://www.loc.gov/catdir/cpsolcco/lcco.html [This link is to the LCC outline only].
LCNAF	LC Name Authorities File http://authorities.loc.gov
LCSH	Library of Congress Subject Headings
LCSHAC	LC Subject Headings: Annotated Card Program (Children's headings)
LCTGM	Thesaurus for Graphic Materials: TGM I, Subject Terms http://www.loc.gov/rr/print/tgm1/
Local	Locally controlled list of terms
MESH	Medical Subject Headings http://www.nlm.nih.gov/mesh/meshhome.html
MIM	Moving Image Materials: Genre terms
NALAT	NAL Agricultural Thesaurus http://agclass.nal.usda.gov/agt/agt.htm

NASAT	NASA Thesaurus http://www.sti.nasa.gov/thesfrm1.htm
NICEM	NICEM (National Information Center for Educational Media) Thesaurus For order info, see http://www.nicem.com/
NIMACSC	NIMA Cartographic Subject Categories
NLMC	NLM Classification http://wwwcf.nlm.nih.gov/class/
NMC	Revised Nomenclature for Museum Cataloging: a revised and expanded version of Robert C. Chenhall's system for classifying man-made objects.
NTISSC	NTIS Subject Categories http://grc.ntis.gov/grcdbg.pdf
RBGENR	Genre Terms: A Thesaurus for Use in Rare Books and Special Collections
Sears	Sears Subject Headings
TEST	Thesaurus of Engineering and Scientific Terms
TGN	Getty Thesaurus of Geographic Names http://www.getty.edu/research/conducting_research/vocabularies/tgn/
UDC	Universal Decimal Classification http://www.udcc.org [This link is to the UDC outline & subscription information.]
WATREST	Thesaurus of Water Resources Terms

Examples:

Subject	Comments
Blasting--United States--History; Explosives--United States--History; Mineral industries--United States--History	[Book about the history of mining and explosives using LC Subject Headings subject terms]
Capitols--Arizona--Phoenix	[Photograph of the Arizona State Capitol using Thesaurus for Graphical Materials subject terms]
Stocks; Investment analysis; Portfolio management	[A guide on stock market investment with subject assigned using Dewey Decimal Classification]
Communication artifact – Documentary artifact	[United States Army medal using the Revised Nomenclature for Museum Cataloging classification system]
Women's suffrage; Voting; Activism	[Document in archival collection regarding women's suffrage]

4. BROWSE TOPIC

Corresponding DC field: Subject*

Definition: Predetermined topic list pertaining to the general content of the original object or digital resource

Required: Recommended

Controlled Vocabulary: Yes. The below are the only allowable values for the **Browse Topic** element. More than one term from this list may be used.

Input Guidelines:

- Choose a topic(s) from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software.
- Separate multiple subject entries with a semicolon followed by a space.

Comments:

- The data from this field categorizes the resource by broad topic and this categorization will be used to enable a topic browse feature. If this field is left blank, the metadata record and related digital resource will not be incorporated into the browse feature. This means that patrons using the topic browse feature will not retrieve items that do not have metadata in the **Browse Topic** element.

Browse Topic Controlled Vocabulary
Agriculture
Arts and architecture
Business and industry
Crime and violence
Education
Family and community
Government and politics
Land and resources
Leisure and travel
Military and war
Native Americans
Race and ethnicity
Religion and philosophy
Science and technology
Society and culture
Transportation
Work and labor

Examples:

Browse Topic	<i>Comments</i>
Government and politics	<i>[Bicycle reflector promoting Willkie/McNary ticket to Pres. & V.P.]</i>
Government and politics; Society and culture	<i>[Document from archival collection of governor's papers regarding voting rights]</i>
Arts and architecture	<i>[Book about a house that has become a landmark]</i>
Land and resources	<i>[Annual state report about Fish and Game activities]</i>
Government and politics	<i>[Photograph of the Arizona State Flag]</i>

Element modified: 2006-08-30

* Mapped to Dublin Core *Subject* element to enable CONTENTdm federated search feature. May impact OAI harvesting and/or OCLC metadata upload.

5. DESCRIPTION

Corresponding DC field: Description

Definition: A narrative of the content of the resource. Description may include but is not limited to: an abstract, table of contents, reference to a graphical representation of content, a tape log or a free-text account of the content.

Required: Yes

Controlled Vocabulary: No

Input Guidelines:

- Enter multiple descriptions in the order of their importance.
- **For audio and video files**, include the relevant information about the playtime length. If the file is a portion of a full length file, include information about the playtime length for the portion and the whole. An example of this could be “Clip is 2 minutes of a 20 minute interview” or “Clip is 10 minutes of a 60 minute video.”
- **For audio and video files**, input the transcription of the file into the **Transcript** element.
- **For cartographic materials**, include map scale in the **Description** element.

Comments:

- **Description** element may be used to denote unique characteristics of the original object such as a watermark visible on the original.

Examples:

Description	Comments
Red Cross nurse beckoning woman to assist wounded soldier	<i>[Description of a poster]</i>
Horse and buggy, in front of the J.C. Penney store, Longmont, Colorado	<i>[Description of a photograph]</i>
Off-white wedding dress that belonged to Flora Anfenger Hornbein who married Philip Hornbein in 1905.	<i>[Description of Museum object]</i>
A collection of 225 posters from the 9 th Colorado International Invitational Poster Exhibition, held 1995 in Fort Collins, Colorado.	<i>[Abstract]</i>
Letter to Amelia Barnsworth from Captain Smythe. Watermark clearly visible on upper right-hand corner.	<i>[Description of watermarked document]</i>
Title page. Prefatory. Preparatory. Southwest Kansas and the Arkansas Valley. What the Government Reports Show. Government Land Office Statistics. The Old and New. Pawnee Rock and its Inscriptions. In and About Kinsley.	<i>[Table of Contents]</i>
1 map: col.; 41 x 50 cm; Relief shown by hachures and spot heights; Inset: diagram of summit; scale 1:63,360	<i>[Description of a map]</i>

Element modified: 2006-08-30

6. LANGUAGE

Corresponding DC field: Language

Definition: Indicates the language(s) of the intellectual content of the resource. This implies the language(s) in which a text is written or the spoken language(s) of an audio or video resource.

Required: No

Controlled Vocabulary: Yes; Refer to the external controlled vocabulary found at <http://www.sil.org/iso639-3/default.asp>.

Input Guidelines:

- Select the language name from the ISO 639-3 draft international standard found at <http://www.sil.org/iso639-3/default.asp>. Input full language name.
- A resource may include multiple languages. Separate each entry with a semicolon and space.

Comments:

- Visual images do not usually have a language unless there is significant text in a caption or in the image itself.
- The controlled vocabulary list is guided by draft international standard ISO 639-3. ISO 639-3 is the result of an effort to standardize all known languages, including languages from Indians of North America. More information at: <http://www.sil.org/iso639-3/default.asp>.

Examples:

Language	Comments
French	[French-language novel]
English; Navajo	[Children's book in English and Navajo]
English; Spanish	[Health brochure in English and Spanish]

7. CONTRIBUTOR

Corresponding DC field: Contributor

Definition: The person(s) or organization(s) that made significant intellectual contributions to the resource but whose contribution is secondary to any person(s) or organization(s) already specified in a **Creator** element.

Required: No

Controlled Vocabulary: No; Optional authority list: Library of Congress Name Authority (<http://authorities.loc.gov/>)

Input Guidelines:

- Enter contributor names in inverted form: Last name, First name, Middle name or Initial. If it is not obvious how to invert or structure a name, use the name form given in an authority list or enter it as it would be in the country of origin.
- A resource may include multiple contributor names. Separate each entry with a semicolon and space.
- Abbreviations for designations of function (such as “ed.” for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at <http://www.library.yale.edu/cataloging/tools.htm>.
- Name authority information can be found at the Library of Congress Authority file at <http://authorities.loc.gov/>.
- **For oral histories**, enter information in the **Interviewer** element.

Comments:

- Enter all secondary creators in the **Contributor** element.
- The **Contributor** element may include the names of editors, transcribers, illustrators, translators, etc.
- Enter name of the primary person or organization that produced the object (like an author’s name) in the **Creator** element.
- Input entities responsible for digitizing an existing resource in the **Digitizing Technician** element.

Examples:

Contributor	Comments
Fowler, John P.; Anderson, Katherine T.	<i>[A book with three authors; the first author is recorded in the Creator element, and the two remaining authors recorded in Contributor element.]</i>
Frank, Otto H. (ed.); Pressler, Mirjam (ed.); Massotty, Susan (tr.)	<i>[The Diary of a Young Girl, written by Anne Frank, edited by Otto H. Frank and Mirjam Pressler, and translated by Susan Massotty.]</i>
Rouse, Jacqueline Anne (ed.); Woods, Barbara (ed.)	<i>[Anthology of articles created by three editors. The first editor is recorded in the Creator element, and the two remaining editors are recorded in the Contributor element.]</i>

Element modified: 2006-08-30

8. PUBLISHER

Corresponding DC field: Publisher

Definition: The entity responsible for making the document available. For published “born digital” resources, **Publisher** is the entity that created the digital resource. Publishers can be a corporate body, publishing house, museum, historical society, university, a project, a repository, etc.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Enter multiple publishers in the order they appear on the resource or in the order of importance.
- Separate each entry by a semicolon and space.
- Omit initial article in publisher names.
- Enter group or organization names in full, direct form.

Comments:

- The **Publisher** element should remain empty for an unpublished work, like a manuscript, diary, etc.

Examples:

Publisher	<i>Comments</i>
United States National Security Council.	<i>[A publication issued by the US National Security Council. This is an example of an organization name in its full direct form.]</i>
Caxton Printers	<i>[Publisher of a print book that was later digitized by another entity]</i>
Denver Art Museum	<i>[Publisher of a born digital resource]</i>
Microsoft Corporation	<i>[Publisher of a born digital resource]</i>

9. TYPE

Corresponding DC field: Type

Definition: The nature or the genre of the digital resource.

Required: Yes

Controlled Vocabulary: Yes; please refer to the DCMI Type Vocabulary (below). The terms below are the only allowable values for the **Type** element. More than one term from this list may be used.

Input Guidelines:

- Use the **Type** element DCMI vocabulary (listed below) to describe the digital manifestation of the resource.
- Choose a type from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software.
- Some digital resources may involve more than one type, e.g. a digitized manuscript collection may have text, image, sound and interactive components. Separate **Type** elements with a semicolon and a space.
- Note that page images are considered text.

Comments:

- Digital representations of three-dimensional objects should use Image, Text or other DCMI Type listed below.
- For complete descriptions of the acceptable values, refer to the DCMI Type Vocabulary at <http://dublincore.org/documents/dcmi-type-vocabulary/>. For the purposes of these guidelines, only nine of the DCMI Type values are valid (see below).

DCMI Type Controlled Vocabulary	
Vocabulary Term	Notes
Collection	<i>Group of things, could be a mixture of these examples</i>
Dataset	<i>Statistical data file, CD-ROM of data, database</i>
Image	<i>Includes DCMI's Still Image. Examples of Image include photographs, stereographs, engravings, paintings, drawings, graphic designs, plans and maps</i>
Moving Image	<i>Animations, movies, television programs, videos</i>
Interactive Resource	<i>Video game, virtual exhibit, website</i>
Service	<i>System that provides function for the end-user, such as e-commerce order fulfillment</i>
Software	<i>Application software such as presentation viewer, word processor</i>
Sound	<i>Sound recording</i>
Text	<i>Scrapbook, diary, poem, home page, manuscripts, music score; Note that page images are text</i>

Examples:

Type	Comments
Text	<i>[A PDF file of a governmental report]</i>
Text; Image	<i>[A digitized pamphlet with images and text]</i>
Text	<i>[Digital images taken of pages of text]</i>
Image	<i>[Digital image of an object (an arrowhead) from a museum]</i>
Sound	<i>[Digitized audio recording of an oral history]</i>
Moving Image	<i>[Digitized video recording of a speech]</i>

10. MATERIAL COLLECTION

Corresponding DC field: Relation: Is Part Of*

Definition: Name of a collection within a repository.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Use local convention to note collection name and number.

Comments:

- When appropriate, use in conjunction with **Material Subcollection** element.
- **For archival collections:** Please review use of **Material Collection**, **Material Subcollection** and **Source Identifier** elements.

Examples:

Material Collection	<i>Comments</i>
RG I Governor's Office	<i>[Archival collection from the Office of the Governor of Arizona.]</i>
MG 29 Arizona Press Women	<i>[A private manuscript collection]</i>
MS 203 L Gordon Dahlber Collection	<i>[A private manuscript collection using a different local convention to denote collection number]</i>

Element modified: 2006-08-30

* Mapped to Dublin Core **Relation: Is Part Of** element to enable CONTENTdm federated search feature. May impact OAI harvesting and/or OCLC metadata upload.

II. MATERIAL SUBCOLLECTION

Corresponding DC field: Relation: Is Part Of*

Definition: Name of a subcollection within a given collection within a repository.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Use local convention to note subcollection (sometimes called series) name and number to further define items within a given material collection.
- The **Material Subcollection** element is useful in describing archival items.

Comments:

- Must use in conjunction with **Material Collection** element.
- **For archival collections:** Please review use of **Material Collection**, **Material Subcollection** and **Source Identifier** elements.

Examples:

Material Subcollection	<i>Comments</i>
SG 8 George W. P. Hunt	<i>[Used in conjunction with RG 1 in Material Collection field; denotes SG 8 within RG 1 Governor's Office]</i>
S 2 Personal Correspondence	<i>[Used in conjunction with MS 203 L Gordon Dahlber Collection; denotes Series 2 within MS 203 L. Gordon Dahlber]</i>

Element modified: 2006-08-30

* Mapped to Dublin Core **Relation: Is Part Of** element to enable CONTENTdm federated search feature. May impact OAI harvesting and/or OCLC metadata upload.

12. GEOGRAPHIC COVERAGE

Corresponding DC field: Coverage [spatial]

Definition: Geographic location relevant to the resource.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Multiple place names, physical regions may be associated with the intellectual content of the resource.
- Separate each entry using a semicolon followed by a space.
- If using place names, select terms from a controlled vocabulary (like *Geographic Names Information System (GNIS)*, *Getty Thesaurus of Geographical Names*, *Library of Congress Subject Headings*, etc.).
- Input map scale in the **Description** element.

Comments:

- Geographic coverage refers to the location(s) covered by the intellectual content of the resource (e.g. place names; longitude and latitude; celestial sector) *not* the place of publication nor the place of the repository.
- **Strongly recommended for use in describing maps, globes and cartographic materials.**
- When possible use standardized vocabularies such as *Library of Congress Subject Headings (LCSH)* or *Getty Museum's Thesaurus of Geographic Names*; a list of possible spatial schemes are listed below.

Spatial Schemes		
Scheme Name	Scheme Label	Definition
TGN	TGN	<i>Thesaurus of Geographic Names</i> http://www.getty.edu/research/conducting_research/vocabularies/tgn/
Point	DCMI Point	Encoding for geographic coordinated to locate a point in space http://dublincore.org/documents/dcmi-point/
Box	DCMI Box	Encoding for geographic limits to define a region of space http://dublincore.org/documents/dcmi-box/
ISO3166	ISO 3166	Codes for the representation of names of countries and their subdivisions http://www.iso.org/iso/en/ISOOnline.frontpage

Examples:

Geographic Coverage	Comments
North America	[Place Name]
Paris	[Place Name]
Salt River	[Reference to document regarding the Rio Salado project on the Salt River]
W 122°14 --W 121°36/ N 48°56--N 48°35	[Map Coordinates]
Hopi Indian Reservation	[Physical region associated with a Hopi basket]

13. ACQUISITION NOTE

Corresponding DC field: *Not applicable*

Definition: The process through which the physical or digital resource was acquired.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Multiple processes or guardianship/ownership changes may be associated with the acquisition of the resource.
- Separate each entry using a semicolon followed by a space.

Comments:

- Recommended for use in describing the provenance, chain of custody, or process by which object was acquired.

Examples:

Acquisition Note	<i>Comments</i>
Alternative Transportation Collection arrived, in digital format, from [name of donating organization]. Most documents were not born digital, however repository only received digital scans of the born analog materials	<i>[Note regarding acquisition of archival collection.]</i>
Donated by the Smith Foundation.	<i>[Museum artifact]</i>

14. EXHIBIT**Corresponding DC field:** Relation: Is Part Of***Definition:** Name of the digital or physical exhibit of which the object was a part.**Required:** No**Controlled Vocabulary:** No**Input Guidelines:**

- Multiple exhibits may be associated with the resource.
- Separate each entry using a semicolon followed by a space.
- May include information relating to the name of the exhibit. Include a URL if the resource relates to an online exhibit.
- Enter the date the exhibit ran in a statement enclosed in parentheses. Include exact opening and closing dates if known. For instance, if an art object was in a museum exhibit that ran from May 15, 2005 to October 1, 2005, include a statement like (Exhibited May 15, 2005 – October 1, 2005).
- If the exhibit is ongoing, record the date the exhibit opened and use a dash. For example, an exhibit that opened in September 2005 and is currently ongoing would appear as: (Exhibited on September 2005 -). *Note: Update metadata to reflect exhibit close date.*

Comments:

- Typically used to describe physical and digital exhibits in cultural institutions, such as a museum or historical society

Examples:

Exhibit	<i>Comments</i>
United States Exploring Expedition, 1838 -1842. Found online at: http://www.sil.si.edu/DigitalCollections/usexex/	<i>[Image of an artifact from an online digital exhibit]</i>
Arizona's Treasures (Exhibited May 2001 – December 2001)	<i>[Image of an artifact from a special exhibit]</i>
Festival of Color (Exhibited Oct 2005 -)	<i>[Image of a painting in a current exhibit]</i>
Chasing Venus: Observing the Transits of Venus, 1631-2004. (Exhibited March 24, 2004 – November 16, 2004). Found online at: http://www.sil.si.edu/exhibitions/chasing-venus/	<i>[Image of an artifact from an exhibit. The digital derivative of that artifact was a part of an online exhibit by the same name.]</i>

* Mapped to Dublin Core **Relation: Is Part Of** element to enable CONTENTdm federated search feature. May impact OAI harvesting and/or OCLC metadata upload.

15. RIGHTS MANAGEMENT

Corresponding DC field: Rights

Definition: Information about rights for access and reproduction held in and over a resource and may include copyright, citation, use or reprint information.

Required: Yes

Controlled Vocabulary: No

Comments:

- A rights management statement may contain information concerning accessibility, reproduction of images, copyright holder, restrictions, securing permissions for use of text or images, etc. Prepare standard wording in advance to accommodate various situations; it may be revised or expanded as needed.
- This field may contain an URL that links to an external website with the rights management information.
- **For audio or video content**, you may want to provide attribution information about the opinions and views expressed in an interview or presentation.

Examples:

Rights Management	Comments
http://www.ala.org/ala/home/copyright.htm	[URL linking to a complete copyright statement]
To order reproductions or inquire about permissions, contact: email@emailaddress.com . Please cite the image number.	[Use information]
Copyright to this resource is held by [Copyright holder name] and is provided here for educational purposes only. It may not be downloaded, reproduced or distributed in any format without written permission of [Copyright holder name]. Any attempt to circumvent the access controls place on this file is a violation of United States and international copyright laws, and is subject to criminal prosecution.	[Rights management statement]
The opinions expressed in this interview are those of the interviewee only. They do not represent the views of [Organization name]. Please contact [Organization name] with questions about the use and reproduction of this resource.	[Oral history interview rights statement]
U.S. and international copyright laws protect this digital image. Commercial use or distribution of the image is not permitted without prior permission of the copyright holder. Please contact [Name] for permission to use the digital image	[Rights management statement]

Element modified: 2006-08-30

16. DATE ORIGINAL

Corresponding DC field: Date*

Definition: Date of creation of the original object.

Required: Yes

Controlled Vocabulary: No

Input Guidelines:

- Enter dates in the form YYYY-MM-DD in accordance with the W3C Date Time Format (W3C-DTF) encoding scheme. Use a single hyphen to separate the year, month and date components:
 - Year: YYYY (1897 for the year 1897)
 - Year and month: YYYY-MM (1897-07 for July 1897)
 - Complete date: YYYY-MM-DD (1897-07-16 for July 16, 1897)
- Always input year with four digits; that is, 1999 instead of '99.
- If indicating a length of time, separate dates with hyphen with a space before and after the hyphen e.g. 1900 – 1911.
- Follow approximate dates with a space and “ca.” to show a date is a circa date. For example, 1945 ca.
- Enter “No date” or “n.d.” for items whose date of creation cannot be determined.
- **For oral histories**, enter the date(s) of the interview in the **Date Original** element. Provide at least the year of the interview. Give day and month information if available.

Comments:

- Enter dates pertaining to the digitized version of the resource under the **Date Digital** element.
- If the resource is “born digital” the **Date Original** and **Date Digital** will be the same.

Examples:

Date Original	<i>Comments</i>
1950-06	<i>[Creation date for a report issued in June 1950]</i>
1948	<i>[Date for digitized article reprint: reprinted, 1948; digitized 2002]</i>
1998-06-15	<i>[Creation date for letter written on June 15, 1998]</i>
1925 ca.	<i>[Approximate year a photograph was taken]</i>
1910 – 1923	<i>[Approximate date for a painting]</i>
No date	<i>[Not able to determine creation date]</i>
2005	<i>[Pamphlet that was born digital in 2005. Date Original and Date Digital each contain the year 2005.]</i>

Element modified: 2006-08-30

* Mapped to Dublin Core **Date** element to enable CONTENTdm federated search feature. May impact OAI harvesting and/or OCLC metadata upload.

17. TIME PERIOD

Corresponding DC field: Coverage [temporal]

Definition: A period represented by, relevant or related to the intellectual content of the resource.

Required: Recommended

Controlled Vocabulary: Yes. The below are the only allowable values for the **Time Period** element. More than one term from this list may be used.

Input Guidelines:

- Select from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software.
- Multiple time periods may be associated with the resource.
- Separate each entry using a semicolon followed by a space.

Comments:

- The data from this field categorizes the resource by time period. This categorization will be used to enable the time period browse functionality. If this field is left blank, the metadata record and related digital resource will not be incorporated into the browse functionality. This means that patrons using the time period browse functionality will not retrieve items that lack metadata in the **Time Period** element.
- Enter dates pertaining to the digitized version of the resource under the **Date Digital** element.
- Enter specific dates pertaining to the original version of the resource under the **Date Original** element.
- If “No Date” or “n.d.” is entered into **Date Original**, leave the **Time Period** element blank.

Time Period Controlled Vocabulary
Pre-Territorial Period (Before 1863)
1860s (1860-1869)
1870s (1870-1879)
1880s (1880-1889)
1890s (1890-1899)
1900s (1900-1909)
1910s (1910-1919)
1920s (1920-1929)
1930s (1930-1939)
1940s (1940-1949)
1950s (1950-1959)
1960s (1960-1969)
1970s (1970-1979)
1980s (1980-1989)
1990s (1990-1999)
2000s (2000-2009)

Examples:

Time Period	Comments
1910s (1910-1919)	[Digital image of a vase created in 1912]
1930s (1930-1939); 1940s (1940-1949)	[Digitized manuscript created circa World War II]
1960s (1960-1969);	[Digitized newspaper from 1969 about the Apollo 11 lunar landing]
1960s (1960-1969); 1940s (1940-1949); 1950s (1950-1959)	[Book published in 1993 and digitized in 2005. The book has articles and speeches (intellectual content) from the American Civil Rights Movement (1940s – 1960s).]

Element modified: 2006-08-30

18. ORIGINAL FORMAT

Corresponding DC field: Format [medium]

Definition: The physical manifestation of the resource.

Required: Yes

Controlled Vocabulary: No

Input Guidelines:

- Multiple values may be associated with the resource.
- Describe the item, from general to specific, separated by a semicolon and space.

Comments:

- The **Original Format** element includes information about the physical manifestation of the resource.
- Enter information related to the digital format of the resource in the **Digital Format** element.
- Enter the phrase “Born digital” in the **Original Format** element for born digital resources.
- Enter technical information related to the digitization process in the **Digitization Specifications** element.

Examples:

Original Format	Comments
Oil on canvas	<i>[Describes the physical nature/material of the resource]</i>
Linen with beads	<i>[Describes the physical nature/material of the resource]</i>
Handwritten letter; Ink on vellum	<i>[Describes the physical material of the resource. Note that the item is described from general to specific, and is separated by semicolon and a space.]</i>
I sound cassette (60 min.)	<i>[Taped oral history interview]</i>
Born digital	<i>[A PDF governmental report originally created in electronic format]</i>

Element modified: 2006-08-30

19. SOURCE IDENTIFIER

Corresponding DC field: Source

Definition: Information about the original object from which the digital resource has been derived.

Whenever possible, use a standard identifier. If no standard exists, use a control number, accession number, barcode, locally derived call number or other local convention.

Required: No

Controlled Vocabulary: No

Comments:

- Standard identifiers may include information such as Dewey Decimal number, LC Call number, NTIS report number, ISSN, ISBN, or some other locally derived identification code.
- Some digital resources are “born digital” and are not derived from a pre-existing resource; in these cases, the **Source Identifier** element is not used. Input unique identifying information about born digital resources in the **Digital Identifier** element.
- Use the **Location** element to denote physical storage location of an item. For example, a specific shelf location of a box, volume or item.
- **For archival collections:** Please review use of **Material Collection**, **Material Subcollection** and **Source Identifier** elements.
- **For archival collections:** Source Identifier helps maintain archival context. It should contain information from **Material Collection** and **Material Subcollection** followed by container information such as box and folder numbers.

Examples:

Source Identifier	Comments
HDI96.N7 M3	<i>[Book with call number from Library of Congress Classification Code]</i>
A 13.88:NE-288	<i>[Government document from the Department of Agriculture]</i>
RG 1 Governor’s Office, SG 8 George W. P. Hunt, Box 4 Folder 2	<i>[Reference to document in archival collection]</i>
MS 203 L Gordon Dahlber Collection, S 2 Correspondence, Box 5 Folder 2	<i>[Reference to letter in a manuscript collection]</i>

Element modified: 2006-08-30

20. LOCATION

Corresponding DC field: *Not applicable*

Definition: Information about the physical storage location of the original object or digital resource.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Multiple values may be associated with the resource.
- Separate each entry using a semicolon followed by a space.

Comments:

- Information in this element is used to assist in locating the original object or digital resource. This is often helpful in pinpointing the storage place of the object or resource.
- This field may be hidden from public view if so desired. This means that the contents of this element can only be viewed using Administrative permissions.

Examples:

Location	Comments
PhD093	<i>[Location of a digitized photograph. The digital derivative is located on a CD-ROM Photodisk number 93.]</i>
H.10.3	<i>[Item (in this case a box) is located on row H section 10 shelf 3]</i>
Digital: PhD001; Print: FD3-37A2	<i>[Location of digital image and the original photograph. The digital image is located on a CD-ROM Photodisk 1 and the print is located in File drawer 3 Folder 37A Item 2.]</i>

21. DIGITAL IDENTIFIER

Corresponding DC field: Identifier

Definition: The name or unique identifier of the digital resource.

Required: Yes

Controlled Vocabulary: No

Input Guidelines:

- Input the name or unique identifier of the digital resource followed by a period and the file extension, e.g. *report.pdf*

Comments:

- The **Digital Identifier** element will typically contain the filename or URL of the resource.
- Input identifying information relating to the *original object* in the **Source Identifier** element.
- Do not input the digital identifier information in the **Title** element. For artifacts or “born-digital” objects without formal titles, use the **Title** element to input a descriptive title such as “Harvey girls photo” or transcribe the title from the resource itself, using a caption from a photograph or a title on a map.

Examples:

Digital Identifier	Comments
97-2251.jpg	[Filename of a digital image]
AnnualReport2000.pdf	[Filename of an Annual Report publication]
Turquoise.tif	[Image of a gemstone in a museum exhibit]
http://onebookaz.org/2002/index_2002.htm	[URL of a webpage]

22. DATE DIGITAL

Corresponding DC field: Date

Definition: The date the object was digitized. The contributing institution may approximate the date a resource was digitized.

Required: Recommended

Controlled Vocabulary: No

Input Guidelines:

- Enter dates in the form YYYY-MM-DD in accordance with the W3C Date Time Format (W3C-DTF) encoding scheme. Use a single hyphen to separate the year, month and date components:
 - Year: YYYY (1897 for the year 1897)
 - Year and month: YYYY-MM (1897-07 for July 1897)
 - Complete date: YYYY-MM-DD (1897-07-16 for July 16, 1897)
- Always input year with four digits; that is, 1999 instead of '99.
- Follow approximate dates with a space and "ca." to show a date is a circa date. For example, 1999 ca.
- If indicating a length of time, separate dates with hyphen with a space before and after the hyphen, e.g. 2003 – 2004.

Comments:

- Enter dates pertaining to the original version of the resource under the **Date Original** element.
- If the resource is "born digital" the **Date Original** and **Date Digital** will be the same.

Examples:

Date Digital	Comments
2004-04-05	<i>[Digital resource created April 5, 2004]</i>
2002	<i>[Date for digitized article reprint: reprinted in 1948; digitized in 2002]</i>
1996	<i>[Date for digitized resource with only year known]</i>
1996-04	<i>[Date for digitized resource with only month and year known]</i>

23. DIGITAL FORMAT

Corresponding DC field: Format

Definition: The digital manifestation or form of the resource.

Required: Yes

Controlled Vocabulary: Yes; internally controlled vocabulary. The below are the only allowable values for the *Digital Format* element.

Input Guidelines:

- Choose a digital format from a list of predetermined terms in internal controlled vocabulary in Acquisition Station (CONTENTdm) system software.
- To learn more about the specific digital formats, refer to the Internet Media Type schema at: <http://www.iana.org/assignments/media-types/>.

Comments:

- Technical information related to the digitization process should be recorded in the *Digitization Specifications* element.

Digital Format Controlled Vocabulary	
ASP (Microsoft Active Server Page)	PERL (Practical Extraction and Report Language)
ASPX (Microsoft Active Service Page .NET)	PHP (Hypertext Preprocessor)
AVI (Audio Visual Interleave)	PNG (Portable Network Graphics)
BMP (Bitmapped Graphics Format)	PPT (Microsoft PowerPoint)
CFM (ColdFusion)	RA, RM (Real Audio or Real Media)
CGI (Common Gateway Interface)	RTF (Rich Text Format)
CSV (Comma Separated Values)	SGML (Standard Generalized Markup Language)
DOC (Microsoft Word)	SWF, FLA (Macromedia Flash)
EML (Electronic Mail)	TIFF (Tagged Image File Format)
GIF (Graphics Interchange Format)	TXT, UTX (ASCII, Unicode)
HTML, HTM (HyperText Markup Language)	URL (Uniform Resource Locator)
JP2 (JPEG 2000)	WAV (Microsoft Wave)
JPEG (Joint Photographic Experts Group)	WMA (Windows Media Application)
LWP (Lotus Word Pro)	WMA (Windows Media Audio)
MDB (Microsoft Access)	WPD (Word Perfect)
MIME (Multipurpose Internet Mail Extensions)	WPS (Microsoft Works)
MOV (QuickTime)	XHTML (eXtensible HyperText Markup Language)
MP3 (MPEG Audio Layer 3)	XLS (Microsoft Excel)
MPEG (Moving Picture Experts Group)	XML (eXtensible Markup Language)
PDF (Portable Document Format)	

Examples:

Digital Format	Comments
PDF (Portable Document Format)	[A pdf document]
WAV (Microsoft Wave)	[An audio clip]
JPEG (Joint Photographic Experts Group)	[A jpg image]

Element modified: 2006-08-30

24. DIGITIZATION SPECIFICATIONS

Corresponding DC field: *Not applicable*

Definition: Describes the process used to capture and create the digital derivative of the original object. Record technical digitization information including the hardware, software and processes used. Include any information that will aid in providing access to and migration of the digital resource.

Required: Recommended

Controlled Vocabulary: No

Input Guidelines:

- Provide information in sentences, listing the digitization processes in chronological order.

Comments:

- This element is not based on any Dublin Core recommendations. However, information that describes technical aspects of the digital resource creation is beneficial for long-term administration, technical support and maintenance.
- **For digital audio and video files**, consider including the following information when crafting a statement in the **Digitization Specifications** element:
 - Audio files: Sampling rate, sample size, bit depth, information about the transfer hardware/software and optimization techniques as applied to the resource.
 - Video files: Video bitrate, color bit depth, aspect ratio, frame rate.
- For a complete description of possible values, refer to *Data Dictionary – Technical Metadata for Digital Still Images* (NISO Z39.87-2002) at <http://www.niso.org>.

In crafting a statement for the **Digitization Specifications** element, consider including the following information:

- File size for file – The number of bytes as provided by the computer system.
- Quality – For visual resources, characteristics such as bit depth, resolution; for multi-media resources, other indicators of quality such as 16-bit audio.
- Compression- Electronic format or compression scheme used for optimized storage and delivery of digital resources.
- Extent of file – Pixel dimensions, pagination, spatial resolution, playtime or other measurement of the physical or temporal extent of the digital resource.
- Creation hardware – If a hardware device was used to create, derive, or generate the digital resource, indicate the particular hardware device. (Examples: flatbed reflective scanner, digital camera). Include manufacturer, model name and model number.
- Creation software – Name and version number of the software used to create the digital resource
- Preferred presentation- Designation of the device, application, medium, or environment recommended for optimal presentation of the digital resource.
- Operating System- Computer operating system through which the digital resource was created. (Examples: Windows, Mac, Linux). Also include version of operating system.
- Creation methodology – State the series of steps, derivations or techniques involved in the creation process. If the creation process is described on a webpage, include the URL.

Example:

Digitization Specifications	Comments
A photographic print was scanned on an Epson Perfection 4990 Flatbed Scanner as a 3000 pixel TIFF image in 8-bit grayscale, resized to 640 pixels in the longest dimension and compressed into JPEG format using Photoshop 6.0.	[Scanned black and white photograph, edited in a graphics program]
Digitized VHS videocassette into streaming Real Media format with 768KBps video bitrate, 16 bit color depth, 720x480 (NTSC) aspect ratio, 30 frames per second.	[Digitized video]

Element modified: 2006-08-30

25. SERIAL INFORMATION

Corresponding DC field: Relation

Definition: Information to enable users to identify, cite and locate continuing publications issued in installments, which are typically numbered and dated.

Required: No

Controlled Vocabulary: No

Comments:

- May include information related to the title of the serial, volume, number, date, and page numbers.
- May include title change information for a periodical.
- May include information related to items that precede or succeed the resource or object being described.
- Examples of serials include journals, magazines, electronic journals, continuing directories, annual reports, newspapers, and monographic series.

Examples:

Serial Information	Comments
Journal of Ecological Studies, vol. 7, 1974, p. 187	<i>[An article entitled "Application of Statistical Methods to Rhizome Growth" from the publication Journal of Ecological Studies.]</i>
Continued by "Kingman daily miner"	<i>[The Mohave daily miner newspaper is now published as Kingman daily miner.]</i>
Continues "Mohave daily miner"	<i>[A Kingman daily miner newspaper was formerly published as Mohave daily miner.]</i>

26. REPOSITORY

Corresponding DC field: *Not applicable*

Definition: Full name of the organization that owns the original object or digital resource.

Required: Yes

Controlled Vocabulary: No

Input Guidelines:

- Capitalize proper names, such as organizational name.
- Enter group or organization names in full, direct form. List organizational divisions, from largest to smallest, separated by periods.
- Enter organizational names uniformly for clear and consistent identification.
- Include URL information if applicable.

Comments:

- This field is intended to aid in the management and preservation of metadata records in a shared environment by identifying the provenance of records and digital resources.

Examples:

Repository	Comments
Arizona Historical Society	<i>[Name of repository]</i>
Arizona State Library, Archives and Public Records. Law and Research Division.	<i>[Name of a repository and its constituent parts.]</i>
Historic Sahuaro Ranch (http://www.sahuaroranch.org/)	<i>[Name of repository and URL to repository website]</i>

27. DIGITIZING TECHNICIAN

Corresponding DC field: *Not applicable*

Definition: Name of person responsible for creating the digital manifestation of the object.

Required: No

Controlled Vocabulary: No

Input Guidelines:

- Enter identifying information such as a full name, initials, etc.
- Separate multiple subject entries with a semicolon followed by a space.

Comments:

- This field may be hidden from public view if so desired. This means that the contents of this element can only be viewed when using Administrative permissions.

Examples:

Digitizing Technician	<i>Comments</i>
Dorothy Grant	<i>[Name of volunteer that scanned photographic images]</i>
Fuller, Sally	<i>[Name of intern that entered the metadata and digitized documents]</i>
Miller, John; Howe, Julia	<i>[Name of two volunteers responsible for digitizing a resource]</i>
MLR	<i>[Initials of employee that digitized documents]</i>

28. FULL TEXT / TRANSCRIPT**Corresponding DC Field:** *Not applicable***Definition:** An exact typewritten account of the contents of a document, audio or video file.**Required:** Recommended**Controlled Vocabulary:** No**Input Guidelines:**

- Conform to standard rules of punctuation. Do not encapsulate transcribed text in quotations.

Comments:

- Transcribed text from documents and audio/video files improves the accuracy of the search tool to discover and retrieve items.
- Enter abstracts, tape logs or general descriptive information in the **Description** element.

Example:

Full Text / Transcript	<i>Comments</i>
Thelma and I met at a dance. You know, there were these dances back then that were organized by the town to celebrate the seasons or various sorts of local holidays.	<i>[A digitized audio file that was transcribed]</i>
By the year 2000, the impact had grown to approximately \$30 billion. While such growth is impressive at first glance, it must be noted that this increase in economic impact occurred during a period in which the state actually lost market share. That's because the late 1990s featured impressive growth in travel and tourism-related spending nationally.	<i>[Text transcribed from a document to enable full-text search & retrieval capabilities]</i>

Element added: 2006-08-30

The following element is an additional metadata field that should be used exclusively for oral history audio files and video files. Please refer to **page 49** for supplemental information regarding metadata for digital audio and video materials for the Arizona Memory Project. The metadata that you contribute to the Arizona Memory Project should comply with these guidelines.

29. INTERVIEWEE

Corresponding DC field: Creator

Definition: Use for Oral Histories: The name of the primary person who is being interviewed

Required: Required for Oral Histories

Controlled Vocabulary: No

Input Guidelines:

- Enter personal names in inverted form: Last name, First name Middle name or Initial. If it is not obvious how to invert or structure a name, use the name form given in an authority list or enter it as it would be in the country of origin.
- If there is doubt as to how to enter a name and the form of name cannot be verified in a controlled vocabulary, enter it as it appears and do not invert. For example: Sitting Bull.
- If the Interviewee is unknown, enter the word "Unknown"
- Birth and death dates, if known, could be added, in accordance with authorized form of name when possible.
- Abbreviations are allowed if they are distinguishing terms added to names of persons and they are abbreviated on the item (such as "Mrs." or "Jr."). If in doubt, spell out the abbreviation.
- Abbreviations for designations of function (such as "ed." for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at <http://www.library.yale.edu/cataloging/tools.htm>.
- Interviewer name (the name of the person conducting the interview) must be entered in the **Interviewer** element.
- **For oral histories:** Leave the **Creator** and **Contributor** elements blank.

Comments: Input entities responsible for digitizing an existing resource in the **Digitizing Technician** element.

Example:

Interviewee	Comments
Shaw, Rev. Anna	[Abbreviation used to indicate Reverend]
Bailey, Louise	[Oral history given by Louise Bailey]

Element added: 2006-08-30

The following element is an additional metadata field that should be used exclusively for oral history audio files and video files. Please refer to **page 49** for supplemental information regarding metadata for digital audio and video materials for the Arizona Memory Project. The metadata that you contribute to the Arizona Memory Project should comply with these guidelines.

30. INTERVIEWER

Corresponding DC field: Contributor

Definition: Use for Oral Histories: The name of the person who conducts the interview.

Required: Required for Oral Histories

Controlled Vocabulary: No

Input Guidelines:

- If known, enter Interviewer name in inverted form: Last name, First name, Middle name or Initial. If it is not obvious how to invert or structure a name, enter it as it would be in the country of origin.
- A resource may include multiple Interviewer names. Separate each entry with a semicolon and space.
- Abbreviations for designations of function (such as “ed.” for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at <http://www.library.yale.edu/cataloging/tools.htm>.
- **For oral histories:** Leave the **Creator** and **Contributor** elements blank.

Comments:

- Enter name of the person being interviewed in the **Interviewee** element.
- Input entities responsible for digitizing an existing resource in the **Digitizing Technician** element.

Example:

Interviewer	Comments
Johansson, Christine E.	[Oral history interviewer]

Element added: 2006-08-30

The following element is an additional metadata field that should be used specifically for audio files (including oral histories) or video files. Please refer to **page 49** for supplemental information regarding metadata for digital audio and video materials for the Arizona Memory Project. The metadata that you contribute to the Arizona Memory Project should comply with these guidelines.

31. FILE SIZE

Corresponding DC field: Format [extent]

Definition: File size in KB and duration of the digital audio file.

Required: Required for Audio and Video files

Controlled Vocabulary: No

Input Guidelines:

- Enter file size information first
- File size information should be followed by “KB”
- Separate file size information and time duration with a semicolon and space.
- Enter time duration of the file. Time duration should be preceded by “Length:” and followed by time duration of the audio file in minutes and seconds.
- Separate file size information and time duration with a semicolon followed by a space.

Comments:

- If the audio file is a part of a full length oral history, enter the full length information in the **Description** element.

Example:

File Size	Comments
2,155 KB; Length: 2 min. 30 sec.	[Digital audio file whose play length lasts 2 minutes 30 seconds]

Element added: 2006-08-30

APPENDICES

APPENDIX A: Metadata Field Administrative Properties

Field Name	DC Field	Required	Controlled Vocabulary	Hidden to Public
1. Title	title	X		
2. Creator	creator	X <i>Use the Interviewee field for oral histories</i>		
3. Subject	subject	X	X	
4. Browse Topic	subject	Recommended	X	
5. Description	description	X		
6. Language	language		X	
7. Contributor	contributor	<i>Use the Interviewer field for oral histories</i>		
8. Publisher	publisher			
9. Type	type	X	X	
10. Material Collection	relation: is part of			
11. Material Subcollection	relation: is part of			
12. Geographic coverage	coverage [spatial]			
13. Acquisition note	<i>none</i>			
14. Exhibit	relation: is part of			
15. Rights management	rights	X		
Metadata--original				
16. Date Original	date	X		
17. Time period	coverage [temporal]	Recommended	X	
18. Original format	Format [medium]	X		
19. Source Identifier	source			
20. Location	<i>none</i>			X
Metadata-digital				
21. Digital Identifier	identifier	X		
22. Date Digital	date	Recommended		
23. Digital format	Format [IMT]	X	X	
24. Digitization Specifications	<i>none</i>	Recommended		
25. Serial Information	Relation			
26. Repository	<i>none</i>	X		
27. Digitization Technician	<i>none</i>			X
28. Full Text / Transcript	<i>none</i>	Recommended		
Metadata Specific to Audio / Video				
29. Interviewee	creator	Required for Oral Histories (see page 42 & 49)		
30. Interviewer	contributor	Required for Oral Histories (see page 43 & 49)		
31. File size	format [extent]	Required for audio and video files (see page 42 & 49)		

APPENDIX B: Metadata for Audio and Video

The chart below provides information on the required and optional metadata fields for audio files (including oral histories) and video files. The metadata that you contribute to the Arizona Memory Project should comply with these guidelines.

Field Name	Required Metadata Fields <i>Required fields denoted by X</i>	
	Audio Files	Video Files
1. Title	X	X
2. Creator	X <i>Use the Interviewee field for oral histories</i>	X <i>Use the Interviewee field for oral histories</i>
3. Subject	X	X
4. Browse Topic	Recommended	Recommended
5. Description	X	X
6. Language		
7. Contributor	<i>Use the Interviewer field for oral histories</i>	<i>Use the Interviewer field for oral histories</i>
8. Publisher		
9. Type	X	X
10. Material Collection		
11. Material Subcollection		
12. Geographic coverage		
13. Acquisition note		
14. Exhibit		
15. Rights management	X	X
16. Date Original	X	X
17. Time period	Recommended	Recommended
18. Original format	X	X
19. Source Identifier		
20. Location		
21. Digital Identifier	X	X
22. Date Digital	Recommended	Recommended
23. Digital format	X	X
24. Digitization Specifications	Recommended	Recommended
25. Serial Information		
26. Repository	X	X
27. Digitization Technician		
28. Full Text / Transcript	Recommended	Recommended
29. Interviewee	Required for oral histories	Required for oral histories
30. Interviewer	Required for oral histories	Required for oral histories
31. File Size	X	X

APPENDIX C: Metadata Crosswalk

SAMPLE CROSSWALK FORMAT

(Note: This crosswalk has been updated to incorporate several changes. Refer to footnotes for information on these changes.)

Field Name <i>Required fields are in all caps</i>	Dublin Core	Museum	Photographs	MARC- Libraries	GILS- Government
TITLE	Title	Formal title or brief descriptive phrase	Formal title or brief descriptive phrase	130\$a, 222\$a, 240\$a, 242\$a, 245\$a, 246\$a, 250\$a,	Title
CREATOR	Creator	Maker	Photographer	100, 110, 111, 700\$a, 710\$a, 711\$a, 720\$a or e	Originator, Author
SUBJECT	Subject	Key words, Historical Association	Subject (L.C. Headings)	050\$a (LC), 082\$a (Dewey), 600\$a, 610\$a, 650\$a, 651\$a, 653\$a	Uncontrolled Term, Controlled Term, Place Keyword, Subject
Browse Topic	Subject				
DESCRIPTION	Description	Description	Photograph Description	300\$a, 500\$a, 505\$a, 520\$a, 521\$a, 586\$a,	Abstract
Language	Language			041\$a, 546\$a	Language of Resource
Contributor	Contributor			700\$a, 710\$a, 711\$a, 720\$a,	Contributor
Publisher	Publisher	Publisher *	Publisher *	260\$a or b, 270\$a-o *	Distributor, Point of Contact
TYPE	Type	Chosen from list of categories	Image	516\$a, 655\$a	Medium
Material Collection	Relation: Is Part Of	Subject based collection name	Collection name		
Material Subcollection	Relation: Is Part Of				
Geographic Coverage	Coverage [spatial] [†]	Geographical Association	Place	033\$a, 034\$a, 043\$a, 255\$c, 500\$a, 522\$a [†]	Supplemental Information, Bounding Coordinates, Special Domain [†]
Acquisition Note				561\$a [‡]	Sources of Data [‡]
Exhibit	Relation: Is Part Of				
RIGHTS MANAGEMENT	Rights	May include name of repository	May include name of repository	540\$a, 856\$u	Use Constraints
DATE ORIGINAL	Date	Date Made Date Range Made	Date Made	260\$c or g, 307\$a, 362\$a, 518\$a, 541\$d, 567\$a,	Date of Publication yyyymmdd
Time Period	Coverage [temporal]			513\$b, 523\$a [§]	Time Period Textual [§]
ORIGINAL FORMAT	Format [medium] ^{**}	Physical dimensions, media	Physical dimensions, print, acetate or nitrate negative, etc	300\$a, 340\$a, 533\$a ^{**}	Available Linkage Type
Source Identifier	Source ^{††}	Accession Number	Photo ID Number	020\$a, 022\$a, 035\$a, 050\$a, 082\$a, 086\$a, 090\$a, 092\$a ^{††}	Available Linkage, Original Control Identifier, Local Control Number, Sources of Data
Location					
DIGITAL IDENTIFIER	Identifier ^{‡‡}			024\$a, 856\$b, 856\$u	
Date Digital	Date				
DIGITAL FORMAT	Format [IMT] ^{§§}	Tiff, jpeg etc.	Tiff, jpeg etc.	856\$q	
Digitization Specifications					
Serial Information	Relation			4xx, 510\$a, 538, 580\$a, 773\$n, 773\$o, 774\$o, 775\$n, 775\$o, 776\$n, 776\$o, 780, 785\$t, 786\$n, 786\$o, 787\$n, 787\$o, 800-830	Cross Reference Relationship, Cross Reference Linkage (if Scheme = URL)
REPOSITORY					
Digitization Technician					
Full Text / Transcript					
Interviewee	Creator			100\$a or e	Originator, Author
Interviewer	Contributor			700\$a or e	Contributor
File Size	Format [extent]			300\$a or b, 306\$a	

^{*} Prior to 2005: Appeared as "Publisher or Repository"; Previously included 700\$a, 710\$a, 711\$a, 720\$c

[†] Prior to 2005: Formerly "Coverage"; Previously included 513\$b, 523\$a; Dublin Core's *Coverage* element previously included Time Period Textual

[‡] Prior to 2005: Previously mapped to Dublin Core's *Source* element; GILS *Sources of Data* previously mapped to DC *Source*

[§] Prior to 2005: Previously mapped to Dublin Core's *Coverage* element

^{**} Prior to 2005: Formerly "Format"; Previously included 856\$q, 245\$h; Includes GILS fields previously mapped to Dublin Core's *Identifier* element

^{††} Prior to 2005: Formerly "Identifier"; Previously included 024\$a, 856\$b, 856\$u

¹¹ Prior to 2005: Formerly "Digital Identifier"; addition of MARC fields 024, 856\$b, 856\$u
¹² Prior to 2005: Formerly "Digital Format"; addition of MARC fields 856q

APPENDIX D: Metadata Worksheet

Element Name Required fields are in all caps	Contents
TITLE	
CREATOR	
SUBJECT	
Browse Topic	
DESCRIPTION	
Language	
Contributor	
Publisher	
TYPE	
Material Collection	
Material Sub Collection	
Geographic Coverage	
Acquisition Note	
Exhibit	
RIGHTS MANAGEMENT	
DATE ORIGINAL	
Time Period	
ORIGINAL FORMAT	
Source Identifier	
Location	
DIGITAL IDENTIFIER	
Date Digital	
DIGITAL FORMAT DIGITIZATION SPECIFICATIONS	
Serial Information	
REPOSITORY	
Digitizing Technician	
Full Text / Transcript	
Interviewee	
Interviewer	
File Size	

APPENDIX E: Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
1. TITLE	The name of the object, such as a title of a book or painting. Typically a title will be a name by which the resource is formally known.	<ul style="list-style-type: none"> • Capitalize the first word of the title and proper names. Do not include articles (the, a, an, or their foreign equivalents) at the beginning of a title, unless the article is a part of a proper name. • Transcribe the title from the resource itself, such as using a caption from a photograph or a title on a map. • For artifacts or “born-digital” objects without formal titles, create a short, descriptive title sufficient to identify the resource, such as “Harvey girls photo”. • For oral histories, enter the phrase “Oral history interview with” followed by the interviewee name and date of interview. • For cartographic materials: In parenthesis, include the date of the cartographic material after the title. 	Y	N
2. CREATOR	The name of the primary person or organization that produced the object, such as writer, photographer, artist or manufacturer. Examples of a Creator include a person, an organization, a service, authors of written documents, collectors of natural specimens or artifacts, organizations that generate archival collections, etc.	<ul style="list-style-type: none"> • Enter personal names in inverted form: Last name, First name Middle name or Initial. If it is not obvious how to invert or structure a name, use the name form given in an authority list or enter it as it would be in the country of origin. • If there is doubt as to how to enter a name and the form of name cannot be verified in a controlled vocabulary, enter it as it appears and do not invert. For example: Sitting Bull. • If the creator is unknown, enter the word “Unknown” in the Creator element. • Birth and death dates, if known, could be added, in accordance with authorized form of name when possible. • Name authority information can be found at the Library of Congress Authority file at http://authorities.loc.gov/. • Abbreviations are allowed if they are distinguishing terms added to names of persons, if they are abbreviated on the item (such as “Mrs.” or “Jr.”). If in doubt, spell out the abbreviation. • Abbreviations for designations of function (such as “ed.” for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at http://www.library.yale.edu/cataloging/tools.htm. • Enter <i>primary creator</i> (the creator listed first on a work). Secondary authors, editors, etc. must be entered in the Contributor element. • Enter corporate authors in full, direct form. List organizational divisions, from largest to smallest, separated by periods. • For oral histories, enter information in the Interviewee and Interviewer elements. 	Y	N

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
3. SUBJECT	What the content of the resource is about or what it is, expressed by headings, keywords, phrases, names, or other terms for significant people, places, and events; includes keywords and phrases that describe a topic of the resource.	<ul style="list-style-type: none"> Separate multiple subject entries with a semicolon followed by a space. If the subject is a person or an organization, use the same form of name as specified in the Creator element. Dashes and/ or other punctuation are allowed. 	Y	Y
4. Browse Topic	Predetermined topic list pertaining to the general content of the original object or digital resource.	<ul style="list-style-type: none"> Choose a topic(s) from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software. Separate multiple subject entries with a semicolon followed by a space. 	Recommended	Y
5. DESCRIPTION	A narrative of the content of the resource. Description may include but is not limited to: an abstract, table of contents, reference to a graphical representation of content, a tape log or a free-text account of the content.	<ul style="list-style-type: none"> Enter multiple descriptions in the order of their importance. For audio and video files, include the relevant information about the playtime length. If the file is a portion of a full length file, include information about the playtime length for the portion and the whole. An example of this could be "Clip is 2 minutes of a 20 minute interview" or "Clip is 10 minutes of a 60 minute video." For audio and video files, input the transcription of the file into the Transcript element. For cartographic materials, include map scale in the Description element. 	Y	N
6. Language	Indicates the language(s) of the intellectual content of the resource. This implies the language(s) in which a text is written or the spoken language(s) of an audio or video resource.	<ul style="list-style-type: none"> Select the language name from the ISO 639-3 draft international standard found at http://www.sil.org/iso639-3/default.asp. Input full language name. A resource may include multiple languages. Separate each entry with a semicolon and space. 	N	Y

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
7. Contributor	The person(s) or organization(s) that made significant intellectual contributions to the resource but whose contribution is secondary to any person(s) or organization(s) already specified in a Creator element.	<ul style="list-style-type: none"> • Enter contributor names in inverted form: Last name, First name, Middle name or Initial. If it is not obvious how to invert or structure a name, use the name form given in an authority list or enter it as it would be in the country of origin. • A resource may include multiple contributor names. Separate each entry with a semicolon and space. • Abbreviations for designations of function (such as “ed.” for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at http://www.library.yale.edu/cataloging/tools.htm. • Name authority information can be found at the Library of Congress Authority file at http://authorities.loc.gov/. 	N	N
8. Publisher	The entity responsible for making the document available. For published “born digital” resources, Publisher is the entity that created the digital resource. Publishers can be a corporate body, publishing house, museum, historical society, university, a project, a repository, etc.	<ul style="list-style-type: none"> • Enter multiple publishers in the order they appear on the resource or in the order of importance. • Separate each entry by a semicolon and space. • Omit initial article in publisher names. • Enter group or organization names in full, direct form. List organizational divisions, from largest to smallest, separated by periods. 	N	N
9. TYPE	The nature or the genre of the digital resource.	<ul style="list-style-type: none"> • Use the Type element DCMI vocabulary (listed below) to describe the digital manifestation of the resource. • Choose a type from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software. • Some digital resources may involve more than one type, e.g. a digitized manuscript collection may have text, image, sound and interactive components. Separate Type elements with a semicolon and a space. • Note that page images are considered text. 	Y	Y

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
10. Material Collection	Name of a collection within a repository.	<ul style="list-style-type: none"> Use local convention to note collection name and number. For archival collections: Please review use of Material Collection, Material Subcollection and Source Identifier elements. 	N	N
11. Material Subcollection	Name of a subcollection within a given collection within a repository.	<ul style="list-style-type: none"> Use local convention to note subcollection (sometimes called series) name and number to further define items within a given material collection. The Material Subcollection element is useful in describing archival items. For archival collections: Please review use of Material Collection, Material Subcollection and Source Identifier elements. 	N	N
12. Geographic Coverage	Geographic location relevant to the resource.	<ul style="list-style-type: none"> Multiple place names, physical regions may be associated with the intellectual content of the resource. Separate each entry using a semicolon followed by a space. If using place names, select terms from a controlled vocabulary (like <i>Geographic Names Information System (GNIS)</i>, <i>Getty Thesaurus of Geographical Names</i>, <i>Library of Congress Subject Headings</i>, etc.). 	N	N
13. Acquisition Note	The process through which the physical or digital resource was acquired.	<ul style="list-style-type: none"> Multiple processes or guardianship/ownership changes may be associated with the acquisition of the resource. Separate each entry using a semicolon followed by a space. 	N	N
14. Exhibit	Name of the digital or physical exhibit of which the object was a part.	<ul style="list-style-type: none"> Multiple exhibits may be associated with the resource. Separate each entry using a semicolon followed by a space. May include information relating to the name of the exhibit. Include a URL if the resource relates to an online exhibit. Enter the date the exhibit ran in a statement enclosed in parentheses. Include exact opening and closing dates if known. For instance, if an art object was in a museum exhibit that ran from May 15, 2005 to October 1, 2005, include a statement like (Exhibited May 15, 2005 – October 1, 2005). If the exhibit is ongoing, record the date the exhibit opened and use a dash. For example, an exhibit that opened in September 2005 and is currently ongoing would appear as: (Exhibited on September 2005 -). <i>Note: Update metadata to reflect exhibit close date.</i> 	N	N

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
15. RIGHTS MANAGEMENT	Information about rights for access and reproduction held in and over a resource and may include copyright, citation or reprint information.	<ul style="list-style-type: none"> • A rights management statement may contain information concerning accessibility, reproduction of images, copyright holder, restrictions, securing permissions for use of text or images, etc. Prepare standard wording in advance to accommodate various situations; it may be revised or expanded as needed. • This field may contain an URL that links to an external website with the rights management information. • For audio or video content, you may want to provide attribution information about the opinions and views expressed in an interview or presentation. 	Y	N
16. DATE ORIGINAL	Date of creation of the original object. Creation or modification date of the original object from which the digital resource was derived or created.	<ul style="list-style-type: none"> • Enter dates in the form YYYY-MM-DD in accordance with the W3C Date Time Format (W3C-DTF) encoding scheme. Use a single hyphen to separate the year, month and date components: Year: YYYY (1897 for the year 1897) Year and month: YYYY-MM (1897-07 for July 1897) Complete date: YYYY-MM-DD (1897-07-16 for July 16, 1897) • Always input year with four digits e.g. 1999 instead of '99. • If indicating a length of time, separate dates with hyphen with a space before and after the hyphen e.g. 1900 – 1911. • Follow approximate dates with a space and “ca.” to show a date is a circa date. For example, 1945 ca. • Enter “No date” or “n.d.” for items whose date of creation is difficult to determine • For oral histories, enter the date(s) of the interview in the Date Original element. Provide at least the year of the interview. Give day and month information if available. 	Y	N
17. Time Period	A period represented by, relevant or related to the intellectual content of the resource	<ul style="list-style-type: none"> • Select from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software. • Multiple time periods may be associated with the resource. • Separate each entry using a semicolon followed by a space. • If “No Date” or “n.d.” is entered into Date Original, leave the Time Period element blank. 	N	Y

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
18. ORIGINAL FORMAT	The physical manifestation of the resource.	<ul style="list-style-type: none"> Multiple values may be associated with the resource. Describe the item, from general to specific, separated by a semicolon and space. 	Y	N
19. Source Identifier	Information about the original object from which the digital resource has been derived. Whenever possible, use a standard identifier. If no standard exists, use control number, accession number, barcode, locally derived call number or other local convention.	<ul style="list-style-type: none"> Standard identifiers may include information such as Dewey Decimal number, LC Call number, NTIS report number, ISSN, ISBN, or some other locally derived identification code. Some digital resources are “born digital” and are not derived from a pre-existing resource; in these cases, the Source Identifier element is not used. Input unique identifying information about born digital resources in the Digital Identifier element. Use the Location element to denote physical storage location of item, e.g. the shelf location of a box, volume or item. For archival collections: Please review use of Material Collection, Material Subcollection and Source Identifier elements. For archival collections: Source Identifier helps maintain archival context. It should contain information from Material Collection and Material Subcollection followed by container information such as box and folder numbers. 	N	N
20. Location	Information about the physical storage location of the original object or digital resource.	<ul style="list-style-type: none"> Multiple values may be associated with the resource. Separate each entry using a semicolon followed by a space. 	N	N
21. DIGITAL IDENTIFIER	The name or unique identifier of the digital resource.	<ul style="list-style-type: none"> Input the name or unique identifier of the digital resource followed by a period and the file extension, e.g. <i>report.pdf</i>. 	Y	N

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
22. Date Digital	The date the object was digitized. The contributing institution may approximate the date a resource was digitized.	<ul style="list-style-type: none"> Enter dates in the form YYYY-MM-DD in accordance with the W3C Date Time Format (W3C-DTF) encoding scheme. Use a single hyphen to separate the year, month and date components: Year: YYYY (1897 for the year 1897) Year and month: YYYY-MM (1897-07 for July 1897) Complete date: YYYY-MM-DD (1897-07-16 for July 16, 1897) Always input year with four digits e.g. 1999 instead of '99. Follow approximate dates with a space and "ca." to show a date is a circa date. For example, 1999 ca. 	Recommended	N
23. DIGITAL FORMAT	The digital manifestation or form of the resource.	<ul style="list-style-type: none"> Choose a digital format from a list of predetermined terms in the internal controlled vocabulary in Acquisition Station (CONTENTdm) system software. To learn more about the specific digital formats, refer to the Internet Media Type schema at: http://www.iana.org/assignments/media-types/ 	Y	Y
24. Digitization Specifications	Describes the process used to capture and create the digital derivative of the original object. Record technical digitization information including the hardware, software and processes used. Include any information that will aid in providing access to and migration of the digital resource.	<ul style="list-style-type: none"> Provide information in sentences, listing the digitization processes in chronological order. For digital audio and video files, consider including the following information when crafting a statement in the Digitization Specifications element: <ul style="list-style-type: none"> Audio files: Sampling rate, sample size, bit depth, information about the transfer hardware/software and optimization techniques as applied to the resource. Video files: Video bitrate, color bit depth, aspect ratio, frame rate. 	Recommended	N
25. Serial Information	Information to enable users to identify, cite and locate continuing publications issued in installments, which are typically numbered and dated.	<ul style="list-style-type: none"> May include information related to the title of the serial, volume, number, date, and page numbers. May include title change information for a periodical. May include information related to items that precede or succeed the resource or object being described. Examples of serials include journals, magazines, electronic journals, continuing directories, annual reports, newspapers, and monographic series. 	N	N

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
26. REPOSITORY	Full name of the organization that owns the original object or digital resource.	<ul style="list-style-type: none"> • Capitalize proper names, such as organizational name. • Enter group or organization names in full, direct form. List organizational divisions, from largest to smallest, separated by periods. • Enter organizational names uniformly for clear and consistent identification. • Include URL information if applicable. 	Y	N
27. Digitization Technician	The person responsible for creating the digital manifestation of the object.	<ul style="list-style-type: none"> • Enter identifying information such as a full name, initials, etc. • Separate multiple subject entries with a semicolon followed by a space. 	N	N
28. Full Text / Transcript	An exact typewritten account of the contents of a document, audio or video file.	<ul style="list-style-type: none"> • Conform to standard rules of punctuation. Do not encapsulate transcribed text in quotations. • Transcribed text from documents and audio/video files improves the accuracy of the search tool to discover and retrieve items. 	Recommended	N
29. INTERVIEWEE	<u>Use for Oral Histories:</u> The name of the primary person who is being interviewed	<ul style="list-style-type: none"> • Enter personal names in inverted form: Last name, First name Middle name or Initial. If it is not obvious how to invert or structure a name, use the name form given in an authority list or enter it as it would be in the country of origin. • If there is doubt as to how to enter a name and the form of name cannot be verified in a controlled vocabulary, enter it as it appears and do not invert. For example: Sitting Bull. • If the Interviewee is unknown, enter the word "Unknown" • Birth and death dates, if known, could be added, in accordance with authorized form of name when possible. • Abbreviations are allowed if they are distinguishing terms added to names of persons and they are abbreviated on the item (such as "Mrs." or "Jr."). If in doubt, spell out the abbreviation. • Abbreviations for designations of function (such as "ed." for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at http://www.library.yale.edu/cataloging/tools.htm. • Interviewer name (the name of the person conducting the interview) must be entered in the <i>Interviewer</i> element. • For oral histories: Leave the <i>Creator</i> and <i>Contributor</i> elements blank. 	Required for Oral Histories	N

Summarized Metadata Definitions and Input Guidelines

Field Name Required fields are in all caps	Definition	Input guidelines	Required	Controlled Vocabulary
30. INTERVIEWER	<p><u>Use for Oral Histories:</u> The person(s) or organization(s) that made significant intellectual contributions to the resource but whose contribution is secondary to any person(s) or organization(s) already specified in the Interviewee element.</p>	<ul style="list-style-type: none"> • If known, enter Interviewer name in inverted form: Last name, First name, Middle name or Initial. If it is not obvious how to invert or structure a name, enter it as it would be in the country of origin. • A resource may include multiple Interviewer names. Separate each entry with a semicolon and space. • Abbreviations for designations of function (such as “ed.” for Editor) are allowed. Enter the designations after the name in parentheses. For more abbreviations and information, refer to the AACR2 Abbreviations list at http://www.library.yale.edu/cataloging/tools.htm. • For oral histories: Leave the Creator and Contributor elements blank. 	Required for Oral Histories	N
31. FILE SIZE	File size in KB and duration of the digital audio file.	<ul style="list-style-type: none"> • Enter file size information first • File size information should be followed by “KB” • Enter time duration of the file. Time duration should be preceded by “Length:” and followed by time duration of the audio file in minutes and seconds. • Separate file size information and time duration with a semicolon followed by a space. 	Required for Audio and Video files	N

Summarized Metadata Definitions and Input Guidelines

APPENDIX F: Sample Metadata Records

SAMPLE RECORD**Example: Born Digital Monograph***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Assaults within ADJC secure care facilities
CREATOR	Vasquez, Stella
SUBJECT	Juvenile delinquents--Violence against--Arizona; Juvenile corrections--Arizona; Correctional institutions--Arizona
Browse Topic	Crime and violence
DESCRIPTION	“The report is organized into six sections. First, some basic information is presented on ADJC assaults during 2002 and 2003. The second section presents information on assaults with injuries. Third, the results of a survey of ADJC Superintendents, Housing Unit Mangers and Security Captains are presented. Fourth, three suggestions to address the ADJC assault problem are presented. The fifth section contains study conclusions. Finally, the appendix contains flow charts of assault reporting and debriefing requirements contained in ADJC procedure I 190.02, Incident Debriefing.” -p.3
Language	English
Contributor	Vivian, John; Chengalath, Gopal; Grimes, Jennifer
Publisher	Arizona Dept. of Juvenile Corrections.
TYPE	Text
Material Collection	State Documents
Material Sub Collection	
Geographic Coverage	
Acquisition Note	Captured online on 2005-07-21 by repository.
Exhibit	
RIGHTS MANAGEMENT	Copyright to this resource is held by Arizona Department of Juvenile Corrections and is provided here for educational purposes only. It may not be downloaded, reproduced or distributed in any format without written permission of Arizona Department of Juvenile Corrections. Any attempt to circumvent the access controls place on this file is a violation of United States and international copyright laws, and is subject to criminal prosecution.
DATE ORIGINAL	2004-06-17
Time Period	2000s (2000-2009)
ORIGINAL FORMAT	Born digital
Source Identifier	DJC I.2:A 77
Location	
DIGITAL IDENTIFIER	AssaultsWithinADJCSecureCareFacilities.pdf
Date Digital	2004-06-17
DIGITAL FORMAT	PDF (Portable Document Format)
Digitization Specifications	Created as Microsoft Word document and subsequently converted to Adobe PDF. File size:186 KB
Serial Information	
REPOSITORY	Arizona State Library, Archives and Public Records. Law and Research Division.
Digitizing Technician	

SAMPLE RECORD**Example: Digitized anthology of articles***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Women in the Civil Rights movement: trailblazers and torchbearers, 1941-1965
CREATOR	Crawford, Vicki L. (ed.)
SUBJECT	Civil rights movements—United States—History—20 th century—Congresses; African American women—History-20 th century—Congresses
Browse Topic	Government and politics; Society and culture
DESCRIPTION	“Articles...originally presented at the conference Women in the Civil Rights Movement: Trailblazers and Torchbearers, 1941-1965, held at the Martin Luther King, Jr. Center for Nonviolent Social Change, October 12-15, 1988...organized by the Division of Continuing Education of Georgia State University and the Martin Luther King, Jr. Center for Nonviolent Social Change, Inc.”
Language	English
Contributor	Rouse, Jacqueline Anne (ed.); Woods, Barbara (ed.)
Publisher	Indiana University Press
TYPE	Text
Material Collection	Arizona State Archives
Material Sub Collection	
Geographic Coverage	United States
Acquisition Note	Gift from Wendi Goen
Exhibit	The role of women in United States history
RIGHTS MANAGEMENT	Copyright to this resource is held by Georgia State University and is provided here for educational purposes only. It may not be downloaded, reproduced or distributed in any format without written permission of Georgia State University. Any attempt to circumvent the access controls place on this file is a violation of United States and international copyright laws, and is subject to criminal prosecution.
DATE ORIGINAL	1993
Time Period	1940s (1940-1949); 1950s (1950-1959); 1960s (1960- 1969)
ORIGINAL FORMAT	Book
Source Identifier	323.1/73
Location	H.10.3
DIGITAL IDENTIFIER	WomenCivilRightsMovement.pdf
Date Digital	2003-01
DIGITAL FORMAT	PDF (Portable Document Format)
Digitization Specifications	Each page was scanned on a flatbed scanner and converted into PDF format using Adobe Acrobat 7.0 software.
Serial Information	
REPOSITORY	Georgia State University Library.
Digitizing Technician	

SAMPLE RECORD**Example: Digitized Newspaper Article***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Liberalism: the fuel of empires?
CREATOR	Glenn, Ezekiel
SUBJECT	Liberalism; Democracy
Browse Topic	Government and politics
DESCRIPTION	2 political scientists help revive debate on how European liberals of centuries past viewed colonialism and imperialism
Language	English
Contributor	
Publisher	Chronicle of Politics
TYPE	Text
Material Collection	Political Newspapers
Material Sub Collection	Ezekiel Glenn Collection
Geographic Coverage	
Acquisition Note	Donated by Foundation for Democracy
Exhibit	
RIGHTS MANAGEMENT	U.S. and international copyright laws protect this digital image. Commercial use or distribution of the image is not permitted without prior permission of the copyright holder. Please contact publisher for permission to use the digital image.
DATE ORIGINAL	1922-09-02
Time Period	1920s (1920-1929)
ORIGINAL FORMAT	Newsprint
Source Identifier	1005.6.30
Location	Basement storage shelf 3
DIGITAL IDENTIFIER	Liberalism_Glenn.pdf
Date Digital	2004-08-20
DIGITAL FORMAT	PDF (Portable Digital Format)
Digitization Specifications	Scanned as a JPEG and converted to Adobe PDF using Adobe Acrobat 5.
Serial Information	Chronicle of Politics, September 2, 1922, Volume XI, Number 2, pp. A19-A22
REPOSITORY	Historic Newspaper Museum
Digitizing Technician	Foley, Bailey
Full Text	Imperialism: the fuel of empires? September 2, 1922. Ezekiel Glenn. Colonialism is the extension of a nation's sovereignty over territory beyond its borders by the establishment of either settler colonies or administrative dependencies in which indigenous populations are directly ruled or displaced. Colonizers generally dominate the resources, labor, and markets of the colonial territory and may also impose socio-cultural, religious and linguistic structures on the conquered population.

SAMPLE RECORD**Example: Digital Image of a Three-Dimensional Object***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Punch bowl
CREATOR	Reed and Barton Corporation
SUBJECT	Tools and equipment for materials – Food service T&E – Bowl, punch; Communication artifacts – Ceremonial artifact – Bowl, punch.
Browse Topic	Arts and architecture; Military and war
DESCRIPTION	Silver and copper punch bowl donated to USS Arizona in 1919, funded by donation from citizens throughout Arizona.
Language	English
Contributor	Mix, L. W.
Publisher	
TYPE	Image
Material Collection	USS Arizona
Material Sub Collection	USS Arizona Silver
Geographic Coverage	
Acquisition Note	Donated by the US Navy.
Exhibit	USS Arizona
RIGHTS MANAGEMENT	To order reproductions or inquire about permissions, contact: email@emailaddress.com . Please cite the image number.
DATE ORIGINAL	1916
Time Period	1910s (1910-1919)
ORIGINAL FORMAT	Silver with copper
Source Identifier	1991.234.001
Location	RM 110
DIGITAL IDENTIFIER	PBowl2005.tif
Date Digital	2005-10
DIGITAL FORMAT	TIFF (Tagged Image File Format)
Digitization Specifications	Photographed with an 8 megapixel Nikon. Cropped and down-sampled using Photoshop 7.0
Serial Information	
REPOSITORY	Arizona State Library, Archives and Public Records. Arizona Capitol Museum Division
Digitizing Technician	Nathan Madison

SAMPLE RECORD**Example: Digitized Map***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Map of Mt. Baker, Wash. (1912)
CREATOR	Easton, C. F. (Charles Finley)
SUBJECT	Baker, Mount (Wash.)--Maps
Browse Topic	Land and resources
DESCRIPTION	1 map: col.; 41 x 50 cm; Relief shown by hachures and spot heights; Inset: diagram of summit; scale 1: 63,360
Language	English
Contributor	
Publisher	Engberg Pharmacy
TYPE	Image; Text
Material Collection	Maps Collection
Material Sub Collection	
Geographic Coverage	W 122°14 --W 121°36/ N 48°56--N 48°35
Acquisition Note	
Exhibit	
RIGHTS MANAGEMENT	This image may be freely downloaded and used. Please give credit to the University of Washington Libraries.
DATE ORIGINAL	1912 ca.
Time Period	1910s (1910-1919)
ORIGINAL FORMAT	1 map: col.; 41 X 50 cm
Source Identifier	G4282.B25 1912 .E2
Location	3 rd floor storage
DIGITAL IDENTIFIER	uwm59.tif
Date Digital	2000 - 2002
DIGITAL FORMAT	TIFF (Tagged Image File Format)
Digitization Specifications	Digitized at 600 dpi using ScanTek scanner
Serial Information	
REPOSITORY	University of Washington Libraries Map Collection
Digitizing Technician	Meza, M.

SAMPLE RECORD**Example: Digitized Audio File***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Oral history interview with Mabel Flowers, 1974 May 23
INTERVIEWEE	Flowers, Mabel
INTERVIEWER	Grable, June
SUBJECT	Oral History – United States; African Americans–Oregon–Portland
Browse Topic	Race and ethnicity
DESCRIPTION	Clip is 10 minutes of a 50 minute interview. 0-4 Interview with an older woman about going to Jamaica for sugarcane. Talks about her mother and her marriage to a Portuguese man. 4-10 Her father owned an oyster house in Astoria. Father's background. One of the sisters attended the Pacific School. The other sister attended the Shoreline School.
Language	English
Publisher	State University. Manuscripts, Archives, and Special Collections.
TYPE	Sound
Material Collection	MS12 Black Oral History Interviews, 1972-1974.
Material Sub Collection	S2 Women's Clubs
Geographic Coverage	
Acquisition Note	
Exhibit	
RIGHTS MANAGEMENT	The opinions expressed in this interview are those of the interviewee only. They do not represent the views of the University Library. For permission to publish, please contact the University Libraries, Manuscripts, Archives, and Special Collections at (555) 555-1234.
DATE ORIGINAL	1974-05-23
Time Period	1970s (1970-1979)
ORIGINAL FORMAT	Interviews on cassette tapes
Source Identifier	MS12 Black Oral History Interviews, 1972-1974, S2 Women's Clubs, Tape I
Location	S.2.1
DIGITAL IDENTIFIER	MS12S2Box4Flowers_TapeI.mp3
Date Digital	2000
DIGITAL FORMAT	MP3 (MPEG Audio Layer 3)
Digitization Specifications	Interview cassette tapes were converted to MP3 files with a bit rate of 16Kbps.
Serial Information	
REPOSITORY	State University. Manuscripts, Archives, and Special Collections.
Digitizing Technician	M. Ramirez
FILE SIZE	10, 555 KB; Length: 10 min. 3 sec.
Transcript	When I was a little girl, I remember going to Jamaica with my mother to buy sugarcane.

SAMPLE RECORD**Example: Digitized photograph***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Sprinkler on Arizona farm
CREATOR	Unknown
SUBJECT	Irrigation-- Arizona
Browse Topic	Agriculture
DESCRIPTION	Image of a sprinkler on an Arizona farm
Language	
Contributor	
Publisher	
TYPE	Image
Material Collection	MG 77 L. E. and Alice B. Hewins Collection
Material Sub Collection	SG 2 Photographs
Geographic Coverage	Arizona
Acquisition Note	
Exhibit	
RIGHTS MANAGEMENT	The Arizona State Archives houses this collection. To order this image please see our order form at http://www.lib.az.us/archives/howtoorder.cfm
DATE ORIGINAL	1925 ca.
Time Period	1920s (1920-1929)
ORIGINAL FORMAT	Photograph; Cyanotype
Source Identifier	MG 77 L. E. and Alice B. Hewins Collection, SG 2 Photographs, Box 44 Folder 7
Location	Vault; PhD 602
DIGITAL IDENTIFIER	05-3226.jpg
Date Digital	2005
DIGITAL FORMAT	JPEG (Joint Photographic Experts Group)
Digitization Specifications	Scanned on a Microtek ArtixScan 2500f scanner at 300 dpi
Serial Information	
REPOSITORY	Arizona State Library, Archives and Public Records. History and Archives Division
Digitizing Technician	L. Devine

SAMPLE RECORD**Example: Born Digital Image***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Michael McColgin at the conservation table
CREATOR	Albin, Jennifer
SUBJECT	Document conservation; McColgin, Michael
Browse Topic	Work and labor
DESCRIPTION	Image of Michael McColgin repairing a damaged document.
Language	
Contributor	
Publisher	
TYPE	Image
Material Collection	RG 99 Arizona State Library, Archives and Public Records
Material Sub Collection	SG 3 Archives
Geographic Coverage	Phoenix, AZ
Acquisition Note	
Exhibit	
RIGHTS MANAGEMENT	The Arizona State Archives houses this collection. To order this image please see our order form at http://www.lib.az.us/archives/howtoorder.cfm
DATE ORIGINAL	2005-07-23
Time Period	2000s (2000-2009);
ORIGINAL FORMAT	Born digital
Source Identifier	RG 99 Arizona State Library, Archives and Public Records, SG 3 Archives, 05-0059
Location	PhD888
DIGITAL IDENTIFIER	05-0059.jpg
Date Digital	2005-07-23
DIGITAL FORMAT	JPEG (Joint Photographic Experts Group)
Digitization Specifications	Image taken with Kodak 7590 camera at 5.0 mega-pixels.
Serial Information	
REPOSITORY	Arizona State Library Archives and Public Records. History and Archives Division.
Digitizing Technician	

SAMPLE RECORD**Example: Digitized Archival Document***(Note: Capitalized bolded element names are mandatory fields)*

Element Name	Contents
TITLE	Ernesto Miranda confession
CREATOR	Phoenix Police Department
SUBJECT	Miranda, Ernesto; Civil rights; Crime
Browse Topic	Crime and violence; Government and politics
DESCRIPTION	Police report containing Ernesto Miranda's confession. Mr. Miranda appealed his conviction in this case to the U.S. Supreme Court. This is the origin of the famous "Miranda Rights."
Language	English
Contributor	Miranda, Ernesto
Publisher	
TYPE	Text
Material Collection	RG 107 Maricopa County
Material Sub Collection	SG 8 Superior Court. Miranda Collection
Geographic Coverage	Phoenix, AZ
Acquisition Note	
Exhibit	
RIGHTS MANAGEMENT	The Arizona State Archives houses this collection. For access to original records or for permission to publish please contact the Arizona State Archives at archive@lib.az.us
DATE ORIGINAL	1963-03-13
Time Period	1960s (1960-1969)
ORIGINAL FORMAT	Document
Source Identifier	RG 107 Maricopa County, SG 8 Superior Court, Miranda Collection, Box 2 Folder 23
Location	D2.5.Top
DIGITAL IDENTIFIER	CR1398.pdf
Date Digital	2001-10-15
DIGITAL FORMAT	PDF (Portable Digital Format)
Digitization Specifications	Scanned from microfilm
Serial Information	
REPOSITORY	Arizona State Library Archives and Public Records. History and Archives Division.
Digitizing Technician	Bill James

SAMPLE RECORD**Example: Website**

(Note: Capitalized bolded element names are mandatory fields)

Element Name	Contents
TITLE	ONEBOOKAZ website from 2002
CREATOR	Arizona State Library, Archives and Public Records
SUBJECT	Book industries and trade--Exhibitions; Publishers and publishing; Book jackets; Bookmarks; Books--Reviews; Titles of books; Book talks; Literacy; Literature; Fiction
Browse Topic	Leisure and travel; Business and industry
DESCRIPTION	Web homepage for ONEBOOKAZ, 2002. Contains links to book information (Animal Dreams), author information (Barbara Kingsolver), participating libraries, feedback page. Contains image of book jacket, logos of sponsors. ONEBOOKAZ logo.
Language	English
Contributor	Muralidharan, Mala; Arizona State Library, Archives and Public Records, Library Development Division; ONEBOOKAZ
Publisher	Arizona State Library, Archives and Public Records. Library Development Division.
TYPE	Interactive resource
Material Collection	ONEBOOKAZ 2002
Material Sub Collection	
Geographic Coverage	Arizona
Time Period	2000s (2000-2009)
Acquisition Note	
Exhibit	ONEBOOKAZ 2002
RIGHTS MANAGEMENT	Content of this resource is copyrighted. Please contact Arizona State Library, Archives and Public records for permission to reproduce.
DATE ORIGINAL	2002-04
ORIGINAL FORMAT	Website
Source Identifier	
Location	
DIGITAL IDENTIFIER	http://onebookaz.org/2002/index_2002.htm
Date Digital	2002-04
DIGITAL FORMAT	HTML, HTM (HyperText Markup Language)
Digitization Specifications	HTML files downloaded from http://onebookaz.org/2002/index_2002.htm on August 23, 2005
Serial Information	
REPOSITORY	Arizona State Library, Archives and Public Records.
Digitizing Technician	Richard Prouty

APPENDIX G: Glossary

Born Digital

A resource that was created in an electronic format. A document created on a word-processor is an example of a born digital resource.

Collection

A related group of items. Its parts may be separately described.

Controlled Vocabulary

A limited set of accepted terms used to describe a resource. A controlled vocabulary aids in indexing, organizing and retrieving similarly themed items.

Crosswalk

Processes and procedures that translate one metadata format into another metadata format

Dataset

Structured information. Examples: spreadsheets, databases, GIS data, midi data.

Digital Resource

Refers to the digital derivative of an existing physical object or a born digital resource. A digital image is an example of a digital resource.

Dublin Core

A metadata standard that specifies a basic ("core") set of metadata elements used in digital libraries, primarily to describe digital resources, for collections management, and for exchange of metadata. The metadata schema was created out of a cooperative venture involving academic institutions in Dublin, Ohio.

Element

Used interchangeably with *Field*. Refers to a particular area designated to hold metadata information.

Event

A temporary occurrence. Examples include exhibition, web-cast, conference, workshop, opening-day, performance, battle, trial, wedding, tea-party, etc.

Field

Used interchangeably with *Element*. Refers to a particular area designated to hold metadata information.

Image

Two dimensional reproduction or likeness, such as photographs, paintings, prints, drawings, other images and graphics, animations and moving pictures, film, diagrams, maps, musical notation. In the context of the *DCMI Type vocabulary*, **image** may include both electronic and physical images.

Interactive resource

Requires user interaction to be understood or experienced. Examples: forms on web pages, applets, multimedia learning objects, chat services, virtual reality.

Interoperability

The ability of a system or a product to work with other systems or products.

Original Object

Used interchangeably with *Physical Object*. A three-dimensional object. Used to refer to an original source object that was created in a nondigital format and subsequently digitized. Examples: a computer, the great pyramid, a sculpture. See *born digital* for items created in an electronic format.

Physical object

Used interchangeably with *Original Object*. A three-dimensional object. Used to refer to an original source object that was created in a nondigital format and subsequently digitized. Examples: a computer, the great pyramid, a sculpture. See *born digital* for items created in an electronic format.

Place

A geographic area.

Service

A system that provides something of value to the end-user. Examples: a photocopying service, a banking service, an authentication service, interlibrary loans or Web server.

Software

Data that is essential to the operation of a computer.

In the context of the *DCMI Type vocabulary*, for software which exists only to create an interactive environment, use **interactive resource** instead.

Sound

Content is primarily audio or intended to be realized in audio. Examples: music, speech, recorded sounds. In the context of the *DCMI Type vocabulary*, the **sound** category includes musical notation, including scores, which are unrealized in sound.

Text

All forms of writing, including printing and typing. Includes numerals, punctuation and symbols, but is distinguished from illustrations. Examples of text include books, letters, dissertations, poems, newspapers, articles, archives of mailing lists, etc. In the context of the *DCMI Type Vocabulary*, use the term **Text** for facsimiles or images of texts.

APPENDIX H: Additional Resources and Further Reading

GENERAL DIGITIZATION GUIDELINES

Arizona State Library, Archives and Public Records Digital Projects Guidelines

<http://www.lib.az.us/digital/index.html>

A Framework of Guidance for Building Good Digital Collections

<http://www.niso.org/framework/Framework2.html>

METADATA

AACR2 Abbreviations

<http://www.library.yale.edu/cataloging/tools.htm>

Dublin Core Metadata Standard

<http://dublincore.org/>

National Information Standards Organization

<http://www.niso.org>

Oral History Cataloging Manual compiled by Marion Matters. Chicago: Society of American Archivists, 1995.

Understanding Metadata (NISO Press)

<http://www.niso.org/standards/resources/UnderstandingMetadata.pdf>

Western States Dublin Core Best Practices – Version 2.0, January 2005

<http://www.cdphheritage.org/resource/metadata/documents/WSDCMBP.pdf>

CONTROLLED VOCABULARIES

- **Name Authority**

Library of Congress Authority

<http://authorities.loc.gov/>

- **Subject**

Art and Architecture Thesaurus

http://www.getty.edu/research/conducting_research/vocabularies/aat/

Dewey Decimal Classification

<http://www.oclc.org/dewey/>

Faceted Application of Subject Terminology

<http://fast.oclc.org/>

Getty Thesaurus of Geographic Names

http://www.getty.edu/research/conducting_research/vocabularies/tgn//

Library of Congress Classification

<http://www.loc.gov/catdir/cpsolcco/lcco.html> [This link is to the LCC outline only].

Library of Congress Name Authorities File

<http://authorities.loc.gov>

Medical Subject Headings

<http://www.nlm.nih.gov/mesh/meshhome.html>

NASA Thesaurus

<http://www.sti.nasa.gov/thesfrm1.htm>

NAL Agricultural Thesaurus

<http://agclass.nal.usda.gov/agt/agt.htm>

NICEM (National Information Center for Educational Media) Thesaurus

For order info <http://www.nicem.com/>

NLM Classification

<http://wwwcf.nlm.nih.gov/class/>

NTIS Subject Categories

<http://grc.ntis.gov/grcdbg.pdf>

Thesaurus for Graphic Materials: TGM I, Subject Terms

<http://www.loc.gov/rr/print/tgm1/>

Thesaurus for Graphic Materials: TGM II, Genre and Physical Characteristic Terms

<http://www.loc.gov/rr/print/tgm2/>

Thesaurus of ERIC Descriptors

<http://www.ericfacility.net/extra/pub/thesearch.cfm>

Universal Decimal Classification

<http://www.udcc.org> [This link is to the UDC outline & subscription information.]

- **Language**

ISO 639-3 (International Organization of Standards)

<http://www.loc.gov/standards/iso639-2/englangn.html>

- **Geographic Coverage**

Thesaurus of Geographic Names

http://www.getty.edu/research/conducting_research/vocabularies/tgn/

Encoding for geographic coordinates to locate a point in space

<http://dublincore.org/documents/dcmi-point/>

Encoding for geographic limits to define a region of space

<http://dublincore.org/documents/dcmi-box/>

Codes for the representation of names of countries and their subdivisions

<http://www.iso.org/iso/en/ISOOnline.frontpage/>

- **Digital format**

MIME Media Types

<http://www.iana.org/assignments/media-types/>

Crafting a statement for DIGITIZATION SPECIFICATIONS element

Data Dictionary – Technical Metadata for Digital Still Images (NISO Z39.87-2002)

<http://www.niso.org>

ADDITIONAL RESOURCES

Library of Congress: Prints and Photographs Reading Room

<http://www.loc.gov/rr/print/resource/resourceguid.html>

CONTENTdm Websites

<http://contentdm.com/>

<http://www.oclc.org/contentdm/default.htm>

CONTENTdm Listserv

<http://listserv.oclc.org/archives/contentdm-l.html>