Utah Manuscripts Assocation (UMA) Encoded Archival Description Best Practice Guidelines, version 1.2 (UMA BPG)

Introduction

The *Utah Manuscripts Association Encoded Archival Description Best Practice Guidelines* must be followed when contributing finding aids to the UMA finding aids database. Institutions should follow the current guidelines for all *newly* encoded finding aids.

These guidelines were prepared by the UMA EAD Working Group during the summer of 2007. The guidelines are based heavily on the Northwest Digital Archive Best Practice Guidelines for EAD 2002 Version 3.1. The RLG Best Practice Guidelines for Encoded Archival Description (2002) and the Online Archive of California Best Practice Guidelines Version 2.0 were also consulted in the creation of these guidelines.

The purpose of the UMA EAD BPG is to:

- ensure a common baseline of encoding for UMA institutions
- promote cooperation between UMA institutions
- facilitate placing finding aids online
- enable users to more easily access descriptions of material held by UMA institutions

Context

These guidelines adhere to EAD 2002 (DTD and Schema) and supplement the <u>EAD Tag Library</u> and the <u>EAD Application Guidelines</u> published by the Society for American Archivists (SAA). They define a common set of practices for encoding archival finding aids using EAD so that they can be aggregated into a unified UMA finding aids database for reliable and robust searching of the region's primary resource materials. Content in the finding aids complies with the current U. S. data content standard for archival description <u>Describing Archives: a Content Standard</u> (DACS) and conforms to the <u>General International Standard Archival Description</u> (ISAD (G)). To accommodate conversion of the region's many legacy (i.e. pre-electronic) finding aids, the guidelines allow some simplifications such as using the Scope/Content element to contain Biographical/Historical data when it is not feasible to separate the two types of data.

Multilevel description

Archival descriptions submitted to the UMA finding aids database should adhere to four fundamental rules of multilevel description²:

- Present all archival description in a hierarchical whole-to-part relationship that proceeds from general description of the collection to more specific descriptions of parts of the collection.
- Give only information relevant to a particular hierarchical level. For example, do not provide an administrative history for an entire department if the creator of the materials being described is a division or branch
- Give information that is common to multiple parts of the collection at the highest appropriate level. Do not repeat information at a lower level of description that has already been given at a higher level.

• In order to make explicit the position of a particular level of description within the hierarchy, embed the description at each level within the description at its next higher level. Also, identify each level of description (i.e., give it a name, such as "Series 1").

An archival description can proceed through various levels and conclude at any level. The archivist determines the organization of a finding aid for each collection based on information supplied by the creator or collector, appraisal information, or a physical survey of the materials themselves. Each UMA institution's available resources and user needs drive the level of detail of its finding aids. While examples presented in these guidelines generally reflect typical archival finding aids for personal papers or organizational records (that is, with description beginning at the collection level and then proceeding to component descriptions of series, subseries, files, and items), the guidelines also accommodate minimally processed and unprocessed collections. For details on component description of such collections, see *Component-level Description of Minimally Processed/Unprocessed Collections*.

General Guidelines

XML and EAD Encoding

EAD is expressed in XML³, a simplified markup language designed to let users define their tags in a fairly easy-to-read way. EAD consists of main *elements*, *child elements* (i.e. *subelements*), and *attributes* of elements. Some elements, such as *<titlestmt>* in the EAD header *<eadheader>*, serve as wrapper elements, containing more specific child elements (in this case, *<author>*, *<subtitle>*, *<titleproper>*) rather than actual content text. Attributes associated with an element generally qualify the element in some way. For example, in the *<unitdate>* element, the *type* attribute may qualify the date as "inclusive" or "bulk" as in:

<unitdate type="bulk" encodinganalog="date">(bulk 1950-1960)</unitdate>

Terminology and Conventions Used

• "**Tag**" refers to the XML markers that enclose an element's data value (i.e., <...> and </...>)

<titleproper>

• "Element" refers to an individual EAD data unit enclosed by a start tag <...> and end tag </...>

<subject>Cowboys</subject>

• "Attribute" refers to a named property of an element that may have different values; in other words, attributes *qualify* elements. Attribute names are rendered in SMALL CAPITAL LETTERS throughout these guidelines. An equals sign (=) shows the relationship between an attribute name and the information (or "value") it contains; the value itself is enclosed by quotation marks.

In the example below, the heading *Clergy – United States* comes from the source *The Library of Congress Subject Heading* which has been abbreviated as *lcsh*.

• "Encoding analog" refers to the suggested mapping of an EAD element to an equivalent element or field in another standard metadata schema, usually MARC 21.

Encodinganalog="440\$a" > Archival Inventories and Guides of the World; <

MARC21: Collections represented by a finding aid in the UMA finding aids database generally also are represented by a MARC cataloging record in a major bibliographic utility such as OCLC's WorldCat. To facilitate creation of a MARC cataloging record from the EAD finding aids, some elements in the top-level <archdesc> area provide "encoding analog" attributes to enable mapping to MARC 21 fields.

- For each element listed in Tables 1 3 which begin on page 16, the guidelines indicate whether an element is required or not by using one of the following four codes in the *Status* column.
 - o **Req** = Required. This EAD tag is required as described in the Notes column.
 - o **MA** = Mandatory when applicable. This EAD tag is mandatory when the information is available or discernable as described in the Notes column.
 - o **Rec** = Recommended. This EAD tag is strongly recommended in order to facilitate access to a collection as described in the Notes column.
 - o **Opt** = Optional. The EAD tag may be used if desired as described in the Notes column.

All finding aids contributed to the UMA finding aids database must comply with guidelines for elements that are designated "Required," "Mandatory when applicable," and "Recommended."

Order of Elements

The EAD Schema requires that certain elements be encoded in a set sequence. The UMA Best Practice Guidelines also present EAD elements in a preferred sequence. While not prescriptive (another sequence may be used if it adheres to the EAD Schema), it is highly recommended that contributors follow this sequence of elements to facilitate the review and consistent formatting of finding aids in the UMA search interface.

Recursion and Repeatability

Although EAD elements may be nested as allowed by the EAD Tag Library (see the "May contain" section of each element description), the UMA guidelines occasionally limit such nesting. For example, the UMA guidelines do not permit a <unittitle> element to contain a nested <unitdate> element. All such limitations are stated in the "Status" column of the detailed element tables.

The repeatability of each element (i.e., whether more than one instance of an element may be used) is also stated in the "Status" column of the detailed element tables. In general, most elements in <archdesc> are not repeatable at the same level of description in UMA BPG-compliant finding aids. When (paragraph) is allowed in an element, it may be repeated as often as necessary (e.g. within

stoophist>, <scopecontent>, <accessrestrict>, etc.). Additional exceptions are noted in the element tables.

Within a given element, no attribute may be used more than once.

Filing Titles

The filing title is a standardized formulation of the collection title that insures alphabetical sorting and consistent display from one repository to the next on the UMA Web site. Because there is no formal element within EAD designated for this purpose, UMA has adopted the practice of utilizing a second instance of the <titleproper> element in the EAD header to hold the filing title. See Table 1 under <titleproper> for details.

Dates

For detailed information on recording and formatting dates, see DACS 2.4. Note in particular that UMA requires that names of months and terms reflecting estimation (such as "circa" or "approximately") be spelled out rather than abbreviated. UMA also recommends (but does not require) that the type of date be specified; this may be done through the DATECHAR attribute. Values that may be recorded in DATECHAR include "creation," "recordkeeping" (record-keeping activity), "publication," or "broadcast."

In addition to entering the appropriate date(s) as text in <unitdate> elements, all <unitdate> date elements *above* the <dsc> (Description of Subordinate Components) section of a finding aid must contain a NORMAL attribute for encoding normalized dates. In the <dsc> section, encoders may wish also to normalize dates pertaining to relatively large or significant groups of material such as series, but this is not required. Also, it is not required to normalize dates of files or items. Normalizing dates renders them potentially searchable by a computer. They are not displayed to users in normalized format.

Dates that are normalized must comply with the International Organization for Standardization (ISO) 8601 standard, using the "Basic Format" of the W3C <u>Date and Time Formats</u> profile of this standard.

Examples:

Single Dates (DACS 2.4.13-2.4.15)

If the collection falls within a single year, use "inclusive" in the TYPE attribute and enter that year (or a more specific date if known) in the <unitdate> element. For exact dates, the format year-month-day is preferred but not required.

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="1944">1944</unitdate>

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="19370426">1937 April 26</unitdate>

Date Ranges (DACS 2.4.7-2.4.9)

In the NORMAL attribute (if used), state the date range in ISO 8601 date intervals format (separate the beginning and ending dates with a slash).

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="1959-11/1959-12">1956 November-December</unitdate>

<unitdate type="bulk" datechar="creation" era="ce" calendar="gregorian" normal="1910/1970">bulk 1910-1970</unitdate>

Broken Date Ranges (e.g., "1934, 1976-1979") (DACS 2.4.11)

Encode dates in separate <unitdate> tags.

```
<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="1934">1934</unitdate>, <unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="1976/1979">1976-1979</unitdate>
```

Open Date Ranges (DACS 2.4.8)

Open dates are not permitted by DACS. If additional material is expected, record the inclusive dates pertaining to the current holdings (using the <accruals> element to describe expected accruals). When the accruals are received, the dates should be revised accordingly.

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="1921/1953">1921-1953</unitdate> [not 1921- or 1921-(ongoing)]

Approximate Dates (e.g., "circa 1950") (DACS 2.4.12, 2.4.15)

Use either "circa" or "approximate" (either is acceptable) in the CERTAINTY attribute. Approximate dates should be normalized using an interval to express the earliest and latest dates in the range.

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian"
certainty="approximate" normal="1845/1855">circa 1850</unitdate> [normalize as an
interval to express an appropriate date range]

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" certainty="approximate" normal="1990/1999">1990s</unitdate> [use an interval to indicate every year of the decade]

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" certainty="approximate" normal="1701/1800">18th century</unitdate>

Undated Material (DACS 2.4.16)

If a date for the described material is not available, and recording an estimated date is not desired (or would be misleading), use "undated" in the <unitdate> element. Do not use the abbreviations "n.d." or "s.d." Normalize as a date range (as with approximate dates), perhaps using the collection dates, or life of creator, etc.

<unitdate type="inclusive" datechar="creation" era="ce" calendar="gregorian" normal="1936/1999">undated</unitdate>

Describing and Linking to Digital Items from the Collection

Linking elements and attributes in EAD adhere to XLink version 1.0, the XML linking standard of the World Wide Web Consortium (W3C). Linking concepts such as links, resources, arcs, traversal, and link behavior are clearly explained in the W3C XLink specification document for version 1.0, available at http://www.w3.org/TR/xlink/. See especially section 2 on XLink concepts.

This section of the UMA encoding guidelines provides basic instructions for linking to objects within the collection that have been digitized. For guidelines on linking from a finding aid to digital resources that are not included in the collection, from one part of a finding aid to another part of the same finding aid, from one finding aid to another finding aid in the UMA database, or from a MARC catalog record to a finding aid, see the following section on **Internal and External Linking**.

Use the <daogrp> Digital Archival Object Group element, with its child elements <resource> Resource, <daoloc> Digital Archival Object Location, and <arc> ARC, for references/links to digital representations of collection items described in the finding aid. The <daogrp> elements may be placed inside a variety of EAD elements: <archdesc>, <archdescgrp>, <archref>, <bioghist>, any <c0x> component group, <did>, <odd>, and <scopecontent>. The UMA recommends using <daogrp> with nested <resource>, <daoloc>, and <arc> subelements rather than using <dao> Digital Archival Object alone. <dao> allows for only one digital representation, while <daogrp> allows for one or more digital representations. Using <daogrp> assures the ability to have multiple digital representations and to maintain consistency in using a single tag, an approach that aids union systems as well as some markup software and tool development.

There are various ways of providing links using the <daogrp> elements. See the EAD Tag Library section on <daogrp>, <resource>, <daoloc>, and <arc>_for details (but note that at this time, the UMA does not provide entity reference functionality as shown in the use of the ENTITYREF attribute in some of the Tag Library encoding examples). Note that <daogrp> must contain <resource>, <daoloc>, and <arc> elements to ensure XLink compliance.

One simple approach, which provides descriptive information about a digitized item as well as a link to the digital file, includes the following steps:

- · Insert a <daogrp> element.
- Within the <daogrp> element, insert a <resource> element. As used here, the <resource> element provides a way to refer to the starting point in the link and to identify whether the link will be made from supplied text or from an icon. If a textual hyperlink is desired (i.e., a link that is activated when the user clicks on the text), include that text within the opening and closing <resource> tags. If a link from an icon is preferred, do not include text between the opening and closing <resource> tags (i.e., leave the <resource> element empty). The LABEL attribute is required as a way to refer to the starting point in the link (it will be referenced in the <arc> element's FROM attribute). Any text can be used in the LABEL attribute, but "start" is typically used.

<resource xlink:type="resource" xlink:label="start">image of Chief
Seattle</resource> [This markup generates a textual link]

<resource xlink:type="resource" xlink:label="start"/> [An empty <resource> element
generates a link from an icon rather than text]

Following the <resource> element, insert a <daoloc> element, which provides information about the ending point in the link. Enter into the HREF attribute the full URL of the digital file you wish to link to (i.e., the digital file that is the destination of the link). Next, enter a value in the LABEL attribute as a way to refer to the destination file (this will be referenced in the <arc> element's TO attribute). Any text can be used in the LABEL attribute, but typical text describes the destination file in some way, such as "text" or "image." In the TITLE attribute, provide alternate text that will display to users who have difficulty seeing online images (as recommended in the World Wide Web Consortium's Web Accessibility Initiative. Generally, supply brief text that describes the linked digital resource (such as "digital image of Linus Pauling, 1954"). Lastly, enter into the ROLE attribute the MIME type (i.e., media or application type) of the destination file. Common MIME types are:

Typical filename extension	Corresponding MIME type
.jpg	image/jpeg
.gif	image/gif
.mov	video/quicktime
.mpg	video/mpeg
.htm, .html	text/html
.pdf	application/pdf
.doc	application/msword
.xml	text/xml

Finally, insert the <arc> element, which provides information about the direction, display, and activation of the link. In the FROM attribute enter the same text that you used in the <resource> element's LABEL attribute. Enter into the TO attribute the same text that you used in the <daoloc> element's LABEL attribute. The <arc> element's SHOW attribute determines where the digital object displays. To replace the current window, choose "replace"; to open the object in a new window choose "new"; to embed the object within the document, choose "embed". Finally, the ACTUATE attribute determines when the object displays. To activate the link automatically when the document loads, choose "onload" (this is the typical choice when the SHOW attribute is set to "embed"); to activate the link when requested by the user, choose "onrequest". E.g.:

```
<daogrp xlink:type="extended">
<resource xlink:type="resource" xlink:label="start">Sen. Mike Mansfield,
1976</resource>
<daoloc xlink:type="locator" xlink:label="image" xlink:title="digital image of Mike
Mansfield, 1976" xlink:role="image/jpeg"
xlink:href="http://www.u.montana.edu/archives/images/mansfield1976.jpg"/>
<arc xlink:type="arc" xlink:from="start" xlink:to="image" xlink:show="new"
xlink:actuate="onRequest"/>
<daogrp>
```

Linking to Two Digital Objects in the Same Link

On occasion, a repository may wish to embed an image in a finding aid document and then provide a link to a larger version of the same image. To do this, nest two <daoloc> elements and

two <arc> elements within a single <daogrp> element. Follow the procedures above for a single digital object with the following modifications/additions:

- The <resource> element should be empty (i.e., there should be no text inside the opening and closing tags):
- <re>ource xlink:type="resource" xlink:label="start"></resource></re>
- Insert a second <daoloc> element and enter into the HREF attribute the URL to the second digital object. Fill in the ROLE, LABEL, and TITLE attributes as above. Note: the LABEL attribute in the second <daoloc> element must contain different text than that contained in the first <daoloc> element.
- In the first <arc> element, set the SHOW attribute to "embed" and the ACTUATE attribute to "onLoad".
- Insert a second <arc> element and enter into the FROM attribute the text used in the LABEL attribute from the first <daoloc> element (i.e., the thumbnail). Enter into the TO element the value used in the LABEL attribute from the second <daoloc> element (i.e., the larger version of the image). Set the SHOW attribute to either "new" or "replace" and the ACTUATE attribute to "onRequest".

Building on the example above, the markup would become:

Internal and External Linking

Linking elements and attributes in EAD adhere to XLink version 1.0, the XML linking standard of the World Wide Web Consortium (W3C). Linking concepts such as links, resources, arcs, traversal, and link behavior are clearly explained in the W3C XLink specification document for version 1.0, available at http://www.w3.org/TR/xlink/. See especially section 2 on XLink concepts.

This section of the UMA encoding guidelines provides basic instructions on internal linking within a finding aid and on external linking to digital resources or objects that are not part of the materials being described by the finding aid (such as an external Web site or a separate finding aid included in the UMA finding aids database). It also provides brief instructions on linking to a finding aid from a MARC catalog record. For guidelines on linking from a finding aid to digitized

or born-digital items that form part of the collection being described, see the previous section, **Describing and Linking to Digital Items from the Collection**.

Internal linking: All internal linking (i.e., linking from one part of the finding aid to another part of the same finding aid) should be encoded using the <ptr>
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of the same that identify or describe the referenced object for the user. In either the <ptr>
of the <ptr>
of the <ptr>
of the stablish a hyperlink
In the

TARGET attribute, enter the id number of the element you wish to link to. The element you wish to link to should contain in its ID attribute the same value that was entered in the <ptr>
of the <ptr

The following is an example of a link from a series called "Correspondence" that is listed in an <arrangement> note to the <c01> component description of that series in the same finding aid:

```
<arrangement id="'a4" encodinganalog="description">
Arranged in three series: <ref xlink:type="simple" xlink:href="#series1"> 1.
Correspondence</ref>. 2. Subject files....</arrangement>
```

Note that the <c01> component-level description for the Correspondence series in this example must contain an ID attribute that has the same value as that referenced in the <ref> element's TARGET attribute:

```
...
<c01 level="series" id="series1" >
<did>
<unittitle>Correspondence</unittitle>
...
</did>
...
</c01>
```

External linking: All external linking (i.e., linking from the finding aid to a resource other than the finding aid) should be encoded using <extptr> Extended Pointer, <extref> Extended Reference, or <archive1> Archive1 Reference elements. Note that whereas <extptr> is an empty external linking tag, <extref> can include text and subelements as part of its reference to an electronic object external to the finding aid. In any of these elements, recommended practice is to use the HREF attribute for the target URL; the ROLE attribute to indicate the corresponding MIME type of the linked resource; the ACTUATE attribute to indicate whether the link activates automatically or must be requested by the user; and the SHOW attribute to indicate whether the target resource should replace the existing resource or appear in a new window (see the descriptions of these attributes in the EAD Tag Library for additional options). Note that in these elements, the value in the LINKTYPE attribute is supplied by the EAD Schema and may not be changed.

The following is an example of an external link to a Web site in a <relatedmaterial> note:

<relatedmaterial>

To search and view the Library of Congress HABS and HAER collections online, visit <extref xlink:type="simple" xlink:role="text/html" xlink:show="new" xlink:actuate="onRequest"</p>

xlink:href="http://memory.loc.gov/ammem/collections/habs_haer/">Built in America</extref>. Visit the National Park Service online to learn more about <extref xlink:type="simple" xlink:role="text/html" xlink:show="new" xlink:actuate="onRequest" xlink:href="http://www.cr.nps.gov/habshaer/">HABS and HAER</extref>. </relatedmaterial>

Linking to another finding aid within the UMA database: To link to a related finding aid in the UMA database, provide in the HREF attribute in <extref> the complete UMA URL.

Linking to a UMA finding aid from a MARC catalog record: To link from a MARC record that describes an archival collection to the finding aid that describes the same collection, include a MARC 856 field in the catalog record. The first indicator code should be "4" and the second indicator code should be "2". In ‡u (subfield u) of the 856 field, enter the complete UMA URL. If desired, add to the 856 field a ‡z that contains brief explanatory text for the user (the wording of the text may be determined by each institution). For example:

856 42 ‡u http://ead.lib.byu.edu:8080/Ead/ead_viewdoc.jsp?eadid=UA1242.xml ‡z Connect to the online finding aid for this collection

Linking to an Institutional Logo

When finding aids are presented in the consortial finding aid database, each finding aid will bear the institutional logo of the contributing consortial partner. This presentation is accomplished through the stylesheet, and is based on pattern matching on the repository code in the <eadheader>. No direct linking to the logo file using <extptr> or <extref> elements is required.

Component Tags

The assignment of component levels should always reflect the arrangement of the collection. A collection may be arranged in various ways. It may be a "flat" arrangement of series, files, or items. More commonly, it may be arranged hierarchically, i.e., it may be divided into one or more of the following groupings:

- collection or record group (this is almost always described at the top level rather than the component level in <archdesc>, but including collection or record group in componentlevel description is permitted by the EAD DTD and the UMA BPG)
 - o subgroups or series (most component-level description begins with one of these levels of arrangement)
 - subgroups may be divided into narrower subgroups and/or into series
 - series may be divided into subseries and/or into files
 - o subseries may be divided into narrower subseries and/or into files

- files may be divided into narrower files and/or into items
 - items may not be divided; item-level description is the narrowest level permitted by the EAD DTD

EAD uses a system of numbered <c0x> component tags to capture the organization and description of a collection. *There is no fixed correspondence between a component tag and the intellectual level*. The component tag is merely a wrapper element used to encode hierarchically arranged, nested descriptions. For example, a <c02> tag may serve to encode a file in one section of a container list and an item in another section.

The UMA BPG requires *numbered* component tags, from <c01> down through a possible nested <c12> level. Do not use unnumbered <c> component tags. If a collection has a "flat" arrangement, use <c01> tags to describe each unit. For hierarchically arranged collections, use nested <c01> through <c012> tags as applicable.

For each <c01> down to <c12> component tag, a LEVEL attribute must also be used in order to distinguish the levels from one another. This encoding will facilitate computer processing, searching, style sheet manipulation, and ultimately, readability of finding aid data.

Flat arrangement

Hierarchical arrangement

<c01 level="item"></c01>	<c01 level="series"></c01>	
<did></did>	<did></did>	
<pre><container type="folder">1</container></pre>	<unitid>Series VII</unitid>	
<unitid>1</unitid>	<unittitle> National Wilderness Committee</unittitle>	
<unittitle>Soldier in quarters</unittitle>	<unitdate normal="1970/1985">1970- 1985</unitdate>	
<unitdate>1944</unitdate>		
	<c02 id="></td></tr><tr><td></c01></td><td><did></td></tr><tr><td><c01 level=" item"="" level="subseries"></c02>	<unittitle>Correspondence</unittitle>
<did></did>		
<pre><container type="folder">1</container></pre>	<c03 level="file"></c03>	
<unitid>2</unitid>	<did></did>	
<unittitle>Boxing match with onlookers, Adak Island</unittitle>	<unittitle>A-F</unittitle>	
<unitdate>1944 July 4</unitdate>		
	<c04 level="file"></c04>	
	<did></did>	

<c01></c01>	<pre><container type="box">13</container></pre>
<did></did>	<container< td=""></container<>
	type="folder">20
<container< td=""><td><unitdate>1970-1980</unitdate></td></container<>	<unitdate>1970-1980</unitdate>
type="folder">1	
<unitid>3</unitid>	
<unittitle> Soldier working on</unittitle>	
jeep	
<unitdate>1944 August 22</unitdate>	<c04>[Another file-level entry, for</c04>
	correspondence 1981-1985]

For collections that are minimally processed or unprocessed, see Component-level Description of Minimally Processed/Unprocessed Collections

Character Encoding

For all special characters encoded in XML, encode directly in UTF-8 Unicode, or use Unicode decimal or hexadecimal character references. Note that all decimal character references should begin with an ampersand & and pound sign #, and end with a semicolon; (use the syntax "&#D;" where D is a decimal number). Note that all hexadecimal character references should begin with an ampersand, pound sign, and lower- or uppercase "x", and end with a semicolon (use the syntax "&#xH;" or "&#XH;" where H is a hexadecimal number); see the Unicode *Code Charts* for hexadecimal character reference codes. For more detailed information on XML, UTF-8, and special character encoding, see the W3C/Unicode Consortium document *Unicode in XML and other Markup Languages*. The following is an example using UTF-8 Unicode hexadecimal character references to express the term "émigrés":

The papers also document trends in high school and university education among Russian émigrés.

Note: "é" the UTF-8 Unicode hexadecimal character reference used to encode the letter "é" in the word "émigrés," derived from the Unicode Latin-1 Supplement code chart.

Characters reserved for XML markup delimiters (ampersand, left angle bracket, and right angle bracket) need to be replaced with the following character entities:

Character	Character Name	Character Entity
&	Ampersand	&
<	Left angle bracket	<
>	Right angle	>

ı		
	bracket	

Note that some XML authoring programs, such as XMetaL, provide Unicode functionality, allowing the encoder to choose the desired special character from a chart.

Headings and Labels

UMA strongly recommends that the use of <head> elements and LABEL attributes be avoided as often as possible. This information does not typically form part of the actual data of the finding aid and is supplied by the UMA stylesheets or locally developed stylesheets. There are exceptions to this general recommendation, however (see, for example, the use of the <head> element in
 bioghist>).

UMA will accept finding aids that contain information in <head> tags and LABEL attributes, but this information will not display in the presentation of the finding aids on the UMA Web site.

Punctuation, White Space, and Empty Elements

UMA recommends that encoders do not generally provide punctuation *between* elements (such as between <unittitle> and <unittate>). This information is supplied by the UMA stylesheets or locally developed stylesheets. Punctuation is acceptable *within* a given element. There are exceptions to this general recommendation; see, for example, the instructions for encoding
bibliography> elements.

Encoders should avoid adding extraneous white space within finding aids. Similarly, as the final step in the editing process before submission to the UMA database, empty elements (tags containing no data, or child elements with data, or links) should be removed.

Special Formatting

Text Formatting

With the exception of using the <emph> tag (see below) and parts of the <bibliography> element set, very little text formatting should be done when a finding aid is created in XML. Most formatting will be done by the stylesheets that format the finding aid for Web display.

Capitalization: Do not use all caps to set off text in a finding aid.

Formatting of Book and Journal Titles, etc.: Format book, journal, painting, and ship titles (any kind of title that would normally be italicized or underlined) by enclosing the title within <title> tags. Set the RENDER attribute to the appropriate attribute value (i.e "doublequote," "italic," or "underline.".

p>Robert Monsen was the editor of the <title render="doublequote">Utah Business
Review</title> for ten years...

bioghist>

Exception: The <titleproper> element in the <eadheader> may not contain a <title> element. To set off a title within a <titleproper> element, enclose the title text within <emph> tags and set the RENDER attribute to "italic." See the EAD Tag Library for more information.

<titleproper>Guide to the <emph render=''doublequote''>Utah Business Review</emph>collection</titleproper>

Special font requirements: Under special circumstances, selected text may be formatted as bold, italicized, underlined, etc. with the <emph> element. Given that the UMA stylesheet formats most headings, labels, and so forth, highlighting selected text via the <emph> element should be done only in cases of special need. Encoders may wish to preview the finding aid through the UMA stylesheet before deciding to format specific text strings with the <emph> element.

Text Used in Attributes: *All* text must be in lower case for XML compliance. Even text that normally is rendered in upper case letters must be entered in lower case when used as an EAD attribute value. Also, avoid using blank spaces in attribute text. E.g.

<unitdate type="inclusive" encodinganalog="coverage">

<relatedencoding="dc">

but not

<c01 level="series">

HREF attributes containing reserved characters: Some URLs included in HREF attributes, particularly the ampersand &, contain characters that are reserved for special purposes in XML. If an ampersand forms part of a URL, substitute the appropriate hexadecimal character reference for the ampersand (specifically, use **&**; instead of the single ampersand). See the table included in the section on Character Encoding for details. For example:

Instead of

http://clerk.ci.seattle.wa.us/&archives/photos/3/400/3.gif

replace the & with & amp;

http://clerk.ci.seattle.wa.us/&archives/photos/3/400/3.gif

Naming and Saving a Document

After opening a new finding aid file, it's a good idea to save the file immediately. The UMA has established the following file naming requirements for finding aid files submitted to the consortium's union database:

· Filenames consist of the repository's MARC repository code, followed by the repository collection number (find your institution's MARC code at http://www.loc.gov/marc/organizations/orgshome.html#searches).

University of Utah UU

Utah State University ULA

Utah State Archives U-Ar

Utah State Historical Society UHi

Southern Utah University UCS

Weber State University UOW

Brigham Young University UPB

- · Filenames should end with an .xml extension (XMetaL supplies this)
- · Filenames should contain no spaces or dashes
- · Filenames may include upper and lowercase letters, numbers, and underscores

Filename examples:

UU_MS608.xml UU is the MARC code for the University of Utah, MS608 is the

collection number assigned to the collection by the University of

Utah Special Collections

UPB_UA1030.xml UPB is the MARC code for Brigham Young University, UA1030 is the collection number assigned to the collection by the L. Tom

Perry Special Collections

Saving your files on a network is a good idea, but in any case, make sure to back your files up regularly.

If a finding aid file is edited or updated and resubmitted to the UMA database, *do not assign a new filename to the revised file*. If the revised finding aid file is intended to replace the previous version of the file, it must have *exactly* the same filename.

Publication and Display

The UMA BPG mandates encoding that is largely independent of a particular online or printed display. UMA BPG-compliant encoding can be manipulated and repurposed through the application of customized stylesheets, such as a local stylesheet, in order to achieve local and/or consortium display needs and formatting preferences.

The **AUDIENCE** attribute and display of non-public information: Some institutions use the AUDIENCE attribute to restrict the display of in-house information to repository staff only. The AUDIENCE attribute, available in many EAD elements such as access and use restrictions,

accruals, and other elements related to collection management and access, may be set to "internal" to indicate that the contents of the element in question should not be displayed to the public. However, note that setting the AUDIENCE attribute to "internal" does not in itself prevent public access; application software and display stylesheets must be set to process the attribute instruction correctly. The UMA stylesheets do not display any element qualified with an AUDIENCE value of "internal" for any purpose, but UMA finding aids submitted to or harvested by other finding aid databases or broadly accessible search and retrieval sites may not have a similar safeguard in place. Once a finding aid passes beyond purely local or consortial control, it is possible (even likely) that information may be displayed to the public that the repository intended strictly for in-house access.

For this reason, the UMA strongly recommends that consortium members avoid the use of the AUDIENCE attribute to protect purely in-house information. A local database or collection management tool, rather than a finding aid, is the safest home for such information.

Long Finding Aids

Each XML finding aid file must be a complete finding aid. Do not divide the finding aid into "manageable" pieces.

Component-level Description of Minimally Processed/Unprocessed Collections

For UMA participants encoding at the container level (often carton level) for minimally processed or unprocessed collections, the Best Practices Working Group strongly encourages UMA archivists provide at least a container/carton-level inventory.

When only a file, item, or box list is provided in <dsc> because the collection lacks any major subdivisions, such as series and subseries, use "in-depth" as the value of the TYPE attribute in <dsc>. In the <c0x> entries that comprise the in-depth inventory, use "file" or "item", as applicable, as the value of the LEVEL attribute in <c0x>. Note that for a box-level <dsc> without series, contiguous boxes with the same <unittitle> should *not* be encoded in separate <c01>s, but encoded as one <c01> with multiple containers. The primary focus of a <c0x> should be on intellectual content and form, even when the content does not reflect careful arrangement, rather than on the boxes in which the materials have been placed:

```
<dsc type="in-depth">
        <c01 level="file">
        <did>
            <unitid encodinganalog="identifier"> [if applicable] </unitid>
            <container type="box">1-4</container>
            <unittitle>Correspondence and lecture notes</unittitle>
            <unittate>circa 1945-1953</unitdate>
        </did>
            <scopecontent> [if desired] 
        </c01>
        <c01 level="file">
...
</dsc>
```

If this approach to minimal processing is taken, recommended practice is to include some text in the collection-level processinfo> element explaining that the collection is unprocessed or has been minimally processed. E.g.:

Alternately, UMA archivists may process and describe papers and records to the series level. This would benefit researchers and also ensure that the UMA adheres to the EAD principle of describing archival collections based on intellectual rather than physical categorization. The encoding for series-level description (with no description at the file or item level) would appear as in the following example:

Because the <dsc> portion of a finding aid is itself not required by the UMA, this recommendation should not be seen as a requirement. The UMA believes, however, that following the recommendation will result in both encoding efficiency and in UMA adherence to the spirit of EAD.

Table 1: <ead>, <eadheader>, and <frontmatter>

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Application Notes Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Libra ry	DA CS
xml version="1.0" encoding="utf-8"?	Req; not repeata ble	XML declaration		
<pre><?xml-stylesheet type="text/xsl" href="http://ead.lib.byu.edu:8080/Ead/shared/ styles/ead.xsl"?></pre>	Rec; not repeata ble	A machine instruction that enables users of XML authoring software such as XMetaL to preview the finding aid while encoding it. The URL in this example links to BYU's stylesheet. Note that the text at left, from the opening angle bracket through the closing angle bracket, must be deleted from the finding aid file before the finding aid is submitted to the UMA database at BYU. To delete this line of text, view the finding aid as plain text (in XMetaL, click on the angle bracket <> view). Highlight the text (line 2 in XMetaL) and delete it.		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra ry	DA CS
		Req=Required MA=Mandatory if applicable	-3	
		Rec=Recommended best practice Opt=Optional		
<ead></ead>	Req; not repeata ble	Outermost wrapping element for an EAD-encoded finding aid.	115- 116	
xmlns="urn:isbn:1-931666-22-9"	Req; not repeata ble	Name space declaration for the EAD schema.		
xmlns:xsi="http://www.w3.org/2001/XMLSc hema-instance"	Req; not repeata ble	Name space declaration for the XML schema itself.		
xmlns:xlink="http://www.w3.org/1999/xlink"	Req; not repeata ble	Name space declaration for the XLink schema used with linking elements. Declaration may also include location of local copy of schema, but this reference should be removed before upload to the UMA EAD repository.		
xsi:schemaLocation="urn:isbn:1-931666-22-9 http://www.loc.gov/ead/ead.xsd"	Req; not repeata ble	URL for the location of the EAD schema. Declaration may also include location of local copy of schema, but this reference should be removed before upload to the UMA EAD repository.		
relatedencoding=	Opt	Note: In most cases, RELATEDENCODI NG attributes will not be set in <ead>, but rather in the <eadheader> and <archdesc> elements.</archdesc></eadheader></ead>		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra ry	DA CS
J		Req =Required MA=Mandatory if applicable	J	
		Rec=Recommended best practice		
		Opt=Optional Most institutions will		
		map each of these to		
		elements to a different encoding system		
		(such as Dublin Core		
		in <eadheader> and MARC21 in</eadheader>		
		<archdesc>). If both</archdesc>		
		of those elements map to the same encoding		
		system, however, the		
		value could be set in		
. 11 1 .	D	<ead>.</ead>	110	
<eadheader></eadheader>	Req;	Wrapper element for information about the	119- 120	
	repeata	finding aid document,	120	
	ble	rather than the		
		archival materials		
		being described in the		
		bulk of the finding aid.		
langencoding="iso639-2b"	Req	Refers to the standard		
		being used for		
		language codes.		
scriptencoding="iso15924"	Req	Refers to the standard		
		being used for script codes.		
relatedencoding="dc"	Req	Indicates a descriptive		
related energy at	Teq	metadata system to		
		which <eadheader></eadheader>		
		elements can be		
		mapped. The		
		intention of the		
		<pre><eadheader> elements is to provide more</eadheader></pre>		
		robust and uniform		
		discovery metadata		
		about the finding aid.		
repositoryencoding="iso15511"	Req	Refers to the standard		
		being used for		
		authoritative		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra	DA CS
ana renaerea in bolajace		Req=Required	ry	
		MA=Mandatory if		
		applicable		
		Rec=Recommended		
		best practice		
		Opt=Optional		
		repository codes.		
countryencoding="iso3166-1"	Req	Refers to the standard		
		being used for		
		authoritative country		
		codes.		
dateencoding="iso8601"	Req	Refers to the standard		
		being used for		
		authoritative date		
<eadid></eadid>	Dage	formats. EAD identifier. The	121	
<eadid></eadid>	Req;	content of this	121	
	not repeata	element, together with		
	ble	its attributes, most		
	oic	uniquely identify the		
		EAD finding aid		
		document.		
countrycode="US"	Req	State in ISO 3166-1		2.1.5
	1	format. Usually "US"		
		(United States) for		
		UMA participants.		
mainagencycode=	Req	Use the repository		2.1.4
		code supplied by the		
		Library of Congress		
		for your institution.		
		The code should be		
		formulated according		
		to ISO 15511 (e.g.,		
		"US-UPB"). Repository codes and		
		instructions for		
		requesting a new code		
		may be found on the		
		Library of Congress		
		MARC Code List for		
		Organizations Web		
		page. Organizations		
		that have different		
		branches or divisions		
		within them should		
		request a separate		
		repository code for		

Elements and Attributes Elements are surrounded by angle brackets	Status	Comments/Applicati on Notes	Tag Libra	DA CS
and rendered in boldface		Req=Required	ry	
		MA=Mandatory if		
		applicable		
		Rec=Recommended		
		best practice		
		Opt=Optional		
		each.		
		For UMA		
		institutions, the		
		MARC codes are		
		as follows:		
		UPB (BYU		
		Provo), UU		
		(University of Utah), ULA		
		(Utah State		
		University),		
		UOW (Weber		
		State University),		
		UCS (Southern		
		Utah University)		
		U-Ar (Utah State		
		Archives and		
		Records Service),		
		and UHi (Utah		
		State Historical		
		Society).		
publicid=	Req	The <eadid> for</eadid>		
and/or identifier=		UMA finding aids		
and/or url=		should include at least		
		one of the following		
		(UMA recommends		
		the use of a		
		PUBLICID):		
		1. PUBLICID:		
		defined in ISO/IEC		
		9070, 1991,		
		intended to be		
		universally		
		unique. ISO		
		9070 provides		
		rules for		
		formulating		
		Formal Public		
		Identifiers		
		(FPIs). See		

Elements and Attributes Elements are surrounded by angle brackets	Status	Comments/Applicati on Notes	Tag Libra	DA CS
and rendered in boldface			ry	
		Req =Required		
		MA=Mandatory if		
		applicable		
		Rec=Recommended		
		best practice		
		Opt=Optional		
		the Online		
		Archive of		
		<u>California's</u>		
		OAC Best		
		Practice		
		Guidelines		
		for Encoded		
		Archival		
		Description,		
		Appendix B		
		for		
		instructions		
		on structuring		
		FPIs. The		
		basic format		
		is:		
		publicid="-		
		//Name of		
		owner::subor		
		dinate named		
		division of		
		owner//TEXT		
		(Country		
		cod::National		
		repository		
		code::local		
		repository		
		reference code::Title of		
		archival		
		unit)//EN"		
		2. IDENTIFIER		
		2. IDENTIFIER : a machine-		
		: a macnine- readable		
		persisent and		
		unique identifier.		
		idenumer.		
		3. URL: the		
			1	
		complete	<u> </u>	

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra ry	DA CS
		Req=Required MA=Mandatory if applicable Rec=Recommended	13	
		best practice		
		Opt=Optional		
		URL of the finding aid. Should be expressed in		
		absolute (not relative) terms.		
encodinganalog="identifier"	MA	Maps Dublin Core element.		
<filedesc></filedesc>	Req;	Wrapper for	142-	
	not	bibliographic	143	
	repeata	information about the		
4410044	ble	finding aid.	252	
<titlestmt></titlestmt>	Req; not repeata ble	Wrapper for finding aid title information.	232	
<titleproper></titleproper>	Req; not repeata ble	Use for the formal title of the <i>finding aid</i> , not the title of the record group or collection being described (e.g., "Register of the Ernest L. Wilkinson papers").	250- 251	
encodinganalog="title"	Req	Mapped Dublin Core element.		
<date></date>	Req; not repeata ble	Use <date> element within the <titleproper> element. Use to encode span dates of described materials (e.g., 1899-1974).</titleproper></date>	97-98	
era="ce"	Rec			
calendar="gregorian"	Rec	-		
normal=	Rec	Enter normalized span dates in ISO 8601 format (e.g.		

Elements and Attributes Elements are surrounded by angle brackets	Status	Comments/Applicati on Notes	Tag Libra	DA CS
and rendered in boldface		Req=Required MA=Mandatory if	ry	
		applicable		
		Rec=Recommended		
		best practice		
		Opt=Optional		
		1899/1974).		
encodinganalog="date"	Rec	Mapped Dublin Core element.		
<titleproper>[filing title]</titleproper>	Req;	Encode the <i>filing title</i>		
	not	of the collection being		
	repeata	described. Note that		
	ble	the filing title is a		
		modified form of the		
		title used for sorting lists of collection		
		titles.		
		uues.		
		For papers created by,		
		collected around, or		
		associated with an		
		individual, the filing		
		title should begin with		
		that person's last		
		name, followed by the		
		first name and		
		optional middle initial		
		surrounded by		
		parentheses:		
		Wilkinson (Ernest L.)		
		papers		
		Smoot (Abraham		
		Owen) papers		
		Facer (Joseph)		
		correspondence		
		When the collection is		
		named for two		
		individuals who share		
		the same name, place		
		the last name at the		
		beginning of the filing		
		title, and list both		
		names and,		
		optionally, a middle		
		initial in parentheses:		
		initial in parentheses:		

Elements and Attributes Elements are surrounded by angle brackets	Status	Comments/Applicati on Notes	Tag Libra	DA CS
and rendered in boldface			ry	
J		Req =Required		
		MA=Mandatory if		
		applicable		
		Rec=Recommended		
		best practice		
		Opt=Optional		
		Harris (Franklin S.		
		and Estelle) papers		
		For individuals who		
		do not share a last		
		name, list the most		
		appropriate name		
		first, with		
		corresponding first		
		name following in		
		parentheses, and then		
		the second last name		
		with its corresponding		
		first name in another		
		set of parentheses:		
		Westwood (Paul		
		Bradford) and Daines		
		(J. Gordon) collection		
		Corporate names and		
		family names should		
		generally be listed		
		just as they are.		
		Encoders are urged to		
		use appropriate		
		abbreviations such as		
		Corp., Co., Inc.,		
		Dept., etc. to maintain		
		brevity:		
		Provo Police Dept.		
		records		
		Salt Lake City		
		photograph collection		
		Nimer family diaries		
		Albertsons, Inc.		
type="filing"	Req	records Indicates that this	-	
type— ming	Keq	instance of		
		<titleproper> is</titleproper>		
		intended for filing		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra ry	DA CS
, and the second		Req=Required MA=Mandatory if applicable		
		Rec=Recommended best practice Opt=Optional		
		purposes		
altrender="nodisplay"	Req	Indicates that this element is not intended for Web or print display of the finding aid; rather, it is used for retrieval sort and display purposes.		
<author></author>	MA; not repeata ble	Name of the person (s) or institution(s) responsible for the intellectual content of the encoded finding aid.	48-49	8.1.5
encodinganalog="creator"	MA	Mapped Dublin Core element.		
<sponsor></sponsor>	Req; Repeata ble	UMA members should acknowledge outside financial help, if appropriate.		
encodinganalog="contributor"	Opt	Mapped Dublin Core element.		
<editionstmt></editionstmt>	Opt; not repeata ble	Holds information about the edition of the finding aid.	123- 124	
<publicationstmt></publicationstmt>	Req; not repeata ble	Wrapper for information about publication or distribution of finding aid.	213	
<publisher></publisher>	Req; not repeata ble	Name of publisher or distributor of finding aid.	214	
encodinganalog="publisher"	Req	Mapped Dublin Core element.		
<address></address>	Req; repeata ble	Wrapper element for the lines of address that comprise the	33	

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra ry	DA CS
		Req=Required MA=Mandatory if applicable		
		Rec=Recommended		
		best practice		
		Opt=Optional		
		address of the		
		repository.		
<addressline></addressline>	Req;	Multiple		
	repeata	<addressline></addressline>		
	ble	elements may be used		
		as needed to provide street address, city,		
		state, zip, phone, fax,		
		email address, and		
		repository URL.		
<date></date>	Req;	Date of publication or	97-98	
	Repeata	copyright of the		
	ble	finding aid.		
era="ce"	Rec			
calendar="gregorian"	Rec	F 4 1' 1		
normal=	Req	Enter normalized publication or		
		copyright date in ISO		
		8601 format (e.g.,		
		2007).		
encodinganalog="date"	Req	Mapped Dublin Core element.		
<seriesstmt></seriesstmt>	Opt;	Wrapper for	234	
	repeata	information about		
	ble	published monographic series, if		
		any, to which the		
		finding aid belongs.		
<notestmt></notestmt>	Opt;	Wrapper for general	181	
	not	notes describing the		
	repeata	finding aid.		
611	ble	XX C	207	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Req;	Wrapper for information about	207-	
	not repeata	encoded version and	208	
	ble	language(s) of finding		
		aid.		
<creation></creation>	MA;	Statement about the	87	
	not	encoding of the		
	repeata	finding aid.		
	ble	Generally include at		

Elements and Attributes	Status	Comments/Applicati	Tag	DA
Elements are surrounded by angle brackets		on Notes	Libra	CS
and rendered in boldface		D D : 1	ry	
		Req=Required		
		MA=Mandatory if		
		applicable Rec=Recommended		
		best practice		
		Opt=Optional least the name of the		
		encoder(s), if known.		
<date></date>	Rec;	Date of the <i>initial</i>	97-98	
\uate>	not	encoding in EAD.	71-70	
	repeata	cheoding in Lind.		
	ble			
era="ce"	Rec			
calendar="gregorian"	Rec			
normal=	Req	Enter normalized		
		publication or		
		copyright date in ISO		
		8601 format (e.g.,		
		2007).		
<langusage></langusage>	Req	Provides a statement	168	
		about languages,		
		sublanguages, and		
		dialects represented in		
		an encoded finding		
		aid. The language(s)		
		in which the finding		
		aid is written can be		
		further specified using		
		the <language></language>		
		subelement within		
	+ D	<langusage>.</langusage>	1.00	
<language></language>	Req;	Use as many	166-	
	repeata	<a href="mailto: language tags as	167	
	ble	necessary to encode languages		
		predominantly		
		represented in the text		
		of the finding aid.		
encodinganalog="language"	Req	Mapped Dublin Core		
cheodingunalog language	I Key	element.		
langcode="en"	Req	Consult ISO 639-2b		
	_	for the correct		
		language code(s).		
scriptcode="latn"	Req	Consult ISO 15924		
	1	for the correct		
		language code(s).		
<descrules></descrules>	MA;	Identifies the rules	102	

Elements and Attributes Elements are surrounded by angle brackets	Status	Comments/Applicati on Notes	Tag Libra	DA CS
and rendered in boldface			ry	
		Req=Required		
		MA=Mandatory if		
		applicable		
		Rec=Recommended best practice		
		Opt=Optional		
	not	used in preparing the		
	repeata	finding aid. UMA		
	ble	recommends the		
		following tagging:		
		<descrules>Finding</descrules>		
		aid based on DACS		
		(<title< td=""><td></td><td></td></title<>		
		render="italic">Descr		
		ibing Archives: A		
		Content		
		Standard). <td></td> <td></td>		
		scrules>		
		Not mandatory in		
		legacy finding aids if		
		the descriptive rules		
		used are not known.		
<revisiondesc></revisiondesc>	Rec;	Used to record		
	not	information about		
	repeata	significant changes to		
	ble	the content of the		
		finding aid after its		
		initial EAD encoding.		
		The revisions should		
		be recorded as a series		
		of <change></change>		
		elements, each		
		containing a <date> and an <item></item></date>		
		and an <item> element.</item>		
<change></change>	Rec;	Wrapper that holds	74	
Change/	repeata	information about	, -	
	ble	notable changes to a		
		finding aid; contains		
		<date> and <item></item></date>		
		elements. Use one		
		<change> element for</change>		
		each change		
		described.		
<date></date>	Rec;	Date of change (e.g.,	97-98	

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Applicati on Notes	Tag Libra ry	DA CS
	not	Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional August 2008).		
	repeata	August 2000).		
era="ce"	Rec			
calendar="gregorian"	Rec			
normal=	Rec	Enter normalized publication or copyright date in ISO 8601 format (e.g., 2007).		
<item></item>	Rec; not repeata ble	Brief narrative description of the change (e.g. Collection accrual inventory added).	161- 162	
<frontmatter></frontmatter>	Opt.; Not repeata ble	<eadheader> rather than <frontmatter> is preferred as the source for titlepage information in the UMA OAI database environment. <frontmatter> may be used in local or "inhouse" applications, but elements contained within <frontmatter> will not be displayed by the UMA database.</frontmatter></frontmatter></frontmatter></eadheader>	146- 147	

Table 2: <archdesc> (Top-Level Description)

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Application Notes Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Libra ry	DACS
<archdesc></archdesc>	Req; not repeatable	Wrapper element for descriptive information about the body of the archival materials being described in the finding aid.	41-42	
level="collection recordgrp series subgrp subseries otherlevel file item"	Req	Use one of the following terms in the attribute: "collection", "recordgrp", "series", "subgrp", "subseries", "otherlevel", "file", or "item". The UMA encoding template for XMetaL defaults to "collection" but this may be changed to another term		
type=" inventory accession"	Rec	Use one of the following terms in the attribute: "inventory" or "accession". The UMA encoding template for XMetaL defaults to "inventory" but this may be changed to another term		
relatedencoding="dc"	Req	Indicate the descriptive encoding system to which the <archdesc> elements—those elements that describe the collection—can be mapped. The UMA encoding template for XMetaL defaults to "dc" encoding analogs for the <archdesc> elements.</archdesc></archdesc>		
<did></did>	Req; not repeatable	Wrapper element for core information about the described collection. <did> may be used at the top-level <archdesc> or at any component level <c0x>.</c0x></archdesc></did>	103- 105	
<repository></repository>	Req; not repeatable	Wrapper for the institution or agency responsible for providing intellectual access to the materials being described.	221- 222	
<name> <corpname></corpname></name>	Req; not repeatable	Top-level name of the repository (e.g., L. Tom Perry Special Collections or Brigham Young University-Hawaii Archives & Special Collections).		2.2.2
encodinganalog=" publisher"	Rec	MARC 21: "852\$a".		
<subarea></subarea>	MA;	A secondary or subsidiary		2.2.2

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status repeatable	Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional administrative level within the repository, such as the name of a department or division (e.g., BYU Film Archives or University Archives, BYU).	Tag Libra ry	DACS
encodinganalog="publi	Rec	MARC 21: "852\$b".		
<address></address>	MA; repeatable	Wrapper element for address information (expressed in <addressline> elements). DACS requires that the location of the repository be provided if not obvious from the name of the repository.</addressline>		2.2.3
<addressline></addressline>	MA; repeatable	If the location (city and state) of the repository is not obvious from the repository's name, provide it in <addressline>. Use one <addressline> element for each line of postal or other address information. <addressline>1130 HBLL</addressline> <addressline>Brigham Young University</addressline> <addressline>Provo, UT 84602</addressline> <addressline> <addressline> <addressline> http://sc.lib.byu.edu</addressline></addressline></addressline></addressline></addressline>		
<unitid></unitid>	Req; not repeatable	A unique control number or reference point for the described material, such as a collection or record group number, lot number, accession number, classification number, or entry number in a bibliography or catalog. Institutions that do not assign a collection or other control number to their collections should enter the text "Consult repository."	255- 256	2.1.3
encodinganalog="ident ifier"	Rec	MARC 21: "099".		

Elements and	Status	Comments/Application Notes	Tag	DACS
Attributes		D D : 1	Libra	
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
countrycode="US"	Req	Use ISO 3166-1 code, usually "US"		2.1.5
		(United States) for UMA participants.		
repositorycode=	Req	Use the same value entered in MAINAGENCYCODE in <eadid>.</eadid>		2.1.4
<origination></origination>	MA; not	Information about the individual(s) or	189-	2.6;
Corigination	repeatable	organization(s) responsible for the creation, accumulation, assembly, and/or maintenance and use of the described materials. <origination> is a wrapper element for one or more of the selected name elements below. At the broadest level of description in <archdesc>, one <origination> element may be used, and it may contain one or more personal, family, or corporate name(s) (the primary creator(s) of the</origination></archdesc></origination>	190	Ch. 9
		entire body of material described in		
		the finding aid).		
<pre><persname> </persname></pre>	MA;	<pre><persname>: Proper name of an</persname></pre>	195-	Ch. 9,
<famname> </famname>	Repeatable	individual (lastname, firstname—	197,	12, 14
<corpname></corpname>	MA	Smith, Joseph, 1805-1844), or <famname>: Proper name of family (direct word order—Smoot family), or <corpname>: Proper name of organization/agency (direct word order—Weber State University), or name of conference or meeting, exhibition, expedition, athletic contest, fair, etc. (see <corpname> in the Tag Library for more details). Use LC name authority if possible or formulate according to DACS or AACR2 rules.</corpname></corpname></famname>	140- 141, 85-86	
source="lcnaf"	MA	If the name was found in the LC Name Authority File, enter "lcnaf" in the source attribute. In this case, there is no need to use the RULES attribute.		
rules="dacs	MA	If the name was not found in the LC		
aacr2"		authority file but was formulated		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req =Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		using DACS or AACR2 rules, enter		
		either "dacs" or "aacr2" in the		
		RULES attribute.		
	Rec	Enter "100" for personal name; "100"		
encodinganalog="creat		for family name; "110" for corporate		
or"		name; "111" for meeting name or		
		conference name for the primary		
		creator of the material (note that both		
		"110" and "111" map to		
		<pre><corpname>). Additional creators</corpname></pre>		
		should be given 7XX encoding		
		analogs.		
		MADC 21, "100 110 111 700		
		MARC 21: "100 110 111 700		
nolo llancatori	Dag	710 711"		Ch. 9
role="creator	Rec	A contextual role or relationship with		Cn. 9
collector		the person, family, or corporate body		
photographer"		within element. Usually use "creator," "collector," or		
		"photographer" at the top level of		
		description. Additional role terms		
		may be used as appropriate. Do not		
		use "subject."		
<unittitle></unittitle>	Req; not	The title, either transcribed or	257-	2.3
\diff(\text{interior})	repeatable	supplied, of the described collection.	258	2.3
	- Primings	A supplied title generally consists of		
		the name of the creator(s) or		
		collector(s) and the nature of the		
		materials being described.		
		<unittitle< td=""><td></td><td></td></unittitle<>		
		encodinganalog="title">David O.		
		McKay papers		
		<unittitle< td=""><td></td><td></td></unittitle<>		
		encodinganalog="title">BYU		
		Women scrapbook		
		If the collection title includes within		
		it the name of a publication, such as		
		the title of a newspaper, enclose the		
		publication name in a <title></td><td></td><td></td></tr><tr><td></td><td></td><td>element, and set the <title> element's</td><td></td><td></td></tr><tr><td></td><td></td><td>RENDER attribute to "italic".</td><td></td><td></td></tr></tbody></table></title>		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Application Notes Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Libra ry	DACS
encodinganalog="title"	Rec	<unitttitle encodinganalog="title">Matthew A. Rogers <title "italic"="" render="">Provo Daily Herald</title> collection MARC 21: "245\$a".</unitttitle>		
<unitdate></unitdate>	Req; repeatable	The date(s) of the described materials. Kinds of dates that may be recorded include publication, creation, record-keeping activity, or broadcast dates. May be a single date or a date range (e.g., 1902-1987). Optionally repeat the <unitdate> element to state bulk date(s), specifying type of date in the TYPE attribute. UMA recommends that words indicating approximation (such as "circa," "approximately," and "probably") as well as names of months be spelled out rather than abbreviated. In compliance with DACS, use "undated" if the date(s) are unknown or would be difficult or misleading to estimate. To insure compliance with ISAD(G), do not nest <unitdate> inside</unitdate></unitdate>	253- 254	2.4
type="inclusive bulk"	Req	 <unittitle>.</unittitle> Use "inclusive" for the full date range (even if date range is a single year, month, or day); use "bulk" only in an optional repeated instance of <unitdate> in which bulk (i.e., predominant) dates are stated.</unitdate> 		
datechar="creation recordkeeping publication broadcast"	Opt	Enter a term that indicates the nature of the recorded date(s), usually creation, record-keeping activity, publication, or broadcast.	11	2.4
era="ce" calendar="gregorian"	Rec Rec			
normal=	Req	Enter normalized begin/end dates in		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req =Required	ry	
surrounded by angle		MA=Mandatory if applicable	- J	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
c c y c		ISO 8601 format (e.g., 1902/1987).		
certainty=	Rec	Indicates the level of confidence for		
		the information given; for example,		
		set to "approximate" or "circa" if the		
		dates are uncertain		
	Rec	"245\$f" for inclusive dates; "245\$g"		
encodinganalog="date"	1100	for bulk dates. MARC 21: "245\$f		
encoungularog date		245\$g".		
<pre><physdesc></physdesc></pre>	Req;	A wrapper element for physical	198	2.5
physicses	repeatable	details about the described materials.	170	2.5
		Use subelements <extent>,</extent>		
		<pre><physfacet>, <dimensions>, and if</dimensions></physfacet></pre>		
		desired, <genreform> to record the</genreform>		
		information.		
		Use separate <physdesc> element</physdesc>		
		sets to accommodate physical		
		description information for different		
		formats included in the collection		
		(e.g., one <physdesc> for number of</physdesc>		
		linear feet of papers, another		
		<pre><physdesc> for number of</physdesc></pre>		
		photographic prints).		
<extent></extent>	Req;	State extent of space occupied (in	131-	2.5
1	repeatable	linear or cubic feet) and/or number of	132	
	1	containers and/or items. If desired,		
		include additional details concerning		
		types and formats of material, as in		
		the first example below. Use		
		separate <extent> tags inside a single</extent>		
		<pre><pre><pre><physdesc> to state the same</physdesc></pre></pre></pre>		
		information in different ways (e.g.,		
		one <extent> element for cubic feet</extent>		
		and one for number of containers		
		inside the same <physdesc> element).</physdesc>		
		Units of measure should be expressed		
		as part of the contents of this tag.		
		1		
		<pre><physdesc><extent>15 linear feet,</extent></physdesc></pre>		
		including correspondence, audio		
		tapes, and		
		photographs <extent>30</extent>		
		boxes		
		1 /		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface encodinganalog="form	Status	Comments/Application Notes Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional <physdesc><extent>354 photographic prints</extent></physdesc> MARC 21: "300\$a".	Tag Libra ry	DACS
at" <physfacet></physfacet>	Opt; not repeatable	For details regarding appearance (e.g., color), materials, technique, etc. For guidance on terminology and syntax in describing physical aspects of particular types of non-textual materials, consult the appropriate content standards listed in Appendix B of DACS.	199-200	2.5; Appen dix B
<dimensions></dimensions>	Opt; not repeatable	For guidance on stating the measurements of particular types of materials (such as the height and width of photographs or the diameter and tape width of reel-to-reel audio tapes, consult the appropriate content standards listed in Appendix B of DACs.	106	2.5; Appen dix B
<materialspec></materialspec>	Opt; not repeatable	For information about a specific type of material that is not recorded in any other element (such as scale for architectural drawings). See Tag Library for details.	175	2.5; Appen dix B
<abstract></abstract>	Req; not repeatable	Use for a very brief summary of collection contents (2-3 sentences) at the highest level (Use <scopecontent> for a fuller description). The text in the top-level <abstract> element is displayed in search result lists presented in the UMA finding aids database. The abstract should provide the user with enough information to make a decision of whether or not to view the complete finding aid.</abstract></scopecontent>	26-27	3.1
encodinganalog="desc ription"	Rec	MARC 21: "5203_".		
<pre><physloc></physloc></pre>	Rec; not repeatable	Name or number of building, room, stack, shelf, or other tangible area	201- 202	4.2.6

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req =Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		where the material is shelved.		
encodinganalog=	Opt	The MARC 852 field contains		
		various subfields that may be mapped		
		to information in <physloc>.</physloc>		
<langmaterial></langmaterial>	Req; not repeatable	A prose statement naming the language(s) of the materials in the collection or unit. One or more language name(s) are enclosed in nested <language> tags.</language>	164- 165	4.5
		If the collection, such as a photograph collection, contains no associated text, state that fact in <langmaterial> using wording similar to the following: <langmaterial>No textual or other language materials are included in the collection.</langmaterial></langmaterial>		
<language></language>	MA; repeatable	Subelement of <langmaterial> within which the language of the materials</langmaterial>	166- 167	4.5
		being described is specified. <langmaterial>Correspondence in <language langcode="eng">English</language> and <language langcode="fre">French</language>.</langmaterial>		
langcode=	MA;	Consult ISO 639-2b for the correct		4.5
	repeatable	language code(s).		
encodinganalog="lang uage"	Rec	MARC 21: "546".		
<daogrp></daogrp>	Opt	If an image is desired to illustrate the finding aid, link to a digital image of an item contained in the collection using <daogrp> and its child elements and attributes.</daogrp>	93-94	
	MA	Required XLink attribute.		
xlink:type="extended"				
<daodesc></daodesc>	Opt;	A wrapper element for caption	92	
	repeatable	information about the linked image.		
<	MA;	Enter the caption information about	193-	
	repeatable	the linked image. This text will	194	

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable	1 y	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
in bouguee		display directly under the image.		
<resource></resource>	MA;	Provides a way to refer to the starting	223-	
\resource>	repeatable	point in the link. When linking to an	224	
	Тереационе	illustration image, do not include text	224	
		in the <resource> element.</resource>		
	MA	Required XLink attribute.		
xlink:type="resource"	IVIA	Required ALIIK attribute.		
xlink:label=	MA	Provides a name for the starting point	13	
AIIIK.1auci—	IVIA	in the link. A typical value is "start."	13	
<daoloc></daoloc>	MA;	The location of the digital image of	95-96	
<uautoc></uautoc>	repeatable	the item in the collection selected to	93-90	
	repeatable	illustrate the finding aid.		
	MA			
vlinktypo-"loogtor"	IVIA	Required XLink attribute.		
xlink:type="locator" xlink:label=	MA	Provides a name for the destination of	13	
XIIIIK.IADEI—	IVIA		13	
wlinketitla="imaga	Ont	the link. A typical value is "image."		
xlink:title="image	Opt	This allows users who have difficulty		
of XXX" [where XXX		seeing online images to see a text		
is a brief description of		statement instead.		
the image] xlink:role=	Rec	In Product the MIME towns of the	19	
xiink:roie=	Rec	Indicates the MIME type of the	19	
		linked image file, such as		
1'11 £	3.4.4	"image/jpeg" or "image/tif".	10	
xlink:href=	MA	Enter the full URL of the image file	18	
4	MA.	that will serve as an illustration.	20.40	
<arc></arc>	MA;	Provides information about the	39-40	
	repeatable	direction, display, and activation of		
-1:14 !!!!	3.4.4	the linked illustration image.		
xlink:type="arc"	MA	Required XLink attribute.	10	
xlink:from=	MA	Enter the same text used in the	18	
		<resource> element's LABEL</resource>		
1' 1 .	3.4.4	attribute, such as "start".	10	
xlink:to=	MA	Enter the same text used in the	19	
		<pre><daoloc> element's LABEL</daoloc></pre>		
	2.64	attribute, such as "image".	10	
1' 1 1 " 1 1"	MA	Determines whether the digital image	19	
xlink:show="embed"		replaces the current window, opens		
		the image in a new window, or		
		embeds the image within the finding		
	3.64	aid document.	10	
41.4	MA	Determines whether the image is	18	
xlink:actuate="onLoad"		displayed automatically when the		
"		finding aid file is opened (loaded) or		
		must be opened by the user (by		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req =Required		
surrounded by angle		MA=Mandatory if applicable	ry	
brackets and rendered				
		Rec=Recommended best practice		
in boldface		Opt=Optional		
1 / 1	0 1 1	clicking on specific text).	202	12 12
<phystech></phystech>	Opt; not	See the Tag Library for information	203	4.2; 4.3
	repeatable	on this element.	405	- 4
<originalsloc></originalsloc>	Opt; not	See Tag Library for information on	187-	6.1
	repeatable	this element.	188	
 	MA;	Provides researcher with background	55-56	2.7;
	repeatable	and context information pertaining to record creator(s) or collector(s).		Ch. 10
		If the biographical or historical		
		information is provided in narrative		
		form, the text must be enclosed in		
		paragraph tags. is		
		repeatable.		
		repeatable.		
		If more than one dioghist> element		
		is needed (e.g., the collection was		
		created by more than one entity), use		
		a separate bioghist> element for		
		each creator, but next them inside a		
		"wrapper" <bioghist> element.</bioghist>		
		_		
		<pre> <</pre>		
		encodinganalog="description>tex		
		t of first note		
		<pre> <br <="" td=""/><td></td><td></td></pre>		
		encodinganalog="description>tex		
		t of second note		
	D			
1, , , , , ,	Rec	In order to distinguish a biographical		
encodinganalog="desc		note (biographical information about		
ription"		a person or family who created the		
		papers) from a historical note		
		(background information on the		
		organization or agency that created		
		the records), this attribute may be		
		used to record the MARC value for		
		one or the other. A value of "5450_"		
		indicates a biographical note. A		
		value of "5451_" indicates an		
		historical note.		
		MARC 21: "5450_ 5451_".		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
<head></head>	Rec;	In order to distinguish a biographical		
	repeatable	note (biographical information about a person or family who created the papers) from a historical note (background information on the organization or agency that created the records), the <heat> element may be used inside <biodesicle bioghist=""> to record the appropriate heading. Use "Biographical Note" to indicate that the note contains biographical information. Use "Historical Note" to indicate that the note contains information about an organization. Repeatable only if more than one</biodesicle></heat>		
<scopecontent></scopecontent>	Req; not repeatable	Provides the researcher with a general description of the document types and formats, as well as the topical range and content of the collection. If organization/arrangement information is difficult to separate, it may be given as part of <scopecontent>, but it is preferable to place that information in <arrangement>. Text should be enclosed in paragraph tags; is repeatable</arrangement></scopecontent>	229- 231	3.1
encodinganalog="desc ription"	Rec	MARC 21: "5202_".		
<odd></odd>	Opt; repeatable	Use for general notes that are not appropriate in more specific elements. The text of the note(s) is enclosed in repeatable tags. A possible use of <odd>: If a legacy finding aid combines <biodhist> and <scopecontent> information, the text could be placed inside <odd>. However, UMA strongly recommends that consortium</odd></scopecontent></biodhist></odd>	185- 186	7.1.2

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable	l J	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
in bougace		members use more specific note		
		elements whenever possible.		
		elements whenever possible.		
		Do not confuse with <note> which</note>		
		may be used to provide a short		
		comment, such as citing the source of		
		a quotation or justifying an assertion.		
		<odd> is intended for information</odd>		
		that is more than a short comment.		
		that is more than a short comment.		
		While <odd> is repeatable, best</odd>		
		practice is to nest a separate		
		element for each general note inside a		
		single <odd> element. The exception</odd>		
		is when a specific <odd> note must</odd>		
		be identified in the TYPE attribute.		
		be identified in the 111 E attribute.		
		Finding aids for photographs or other		
		collections sometimes include essay-		
		like contextual or interpretive notes		
		that belong in neither sloghist> or		
		<pre><scopecontent> because they</scopecontent></pre>		
		describe neither the creator of the		
		collection nor the contents of the		
		collection. Example: A brief essay		
		on the history of Japanese internment		
		camps in the Northwest in a personal		
		collection of photographs of a		
		Japanese internment camp in Utah.		
		<pre><odd> may be used to accommodate</odd></pre>		
		such notes. Enter "hist" into the		
		<pre><odd> TYPE attribute to specify that</odd></pre>		
		this is a contextual/interpretative		
		note.		
		For other general notes, a rested		
		For other general notes, a nested		
		<head> element containing a brief</head>		
		heading clarifying the contents of the		
		note may be provided, but <i>only if the</i>		
	Das	note is needed.		
anaadinaanala - U.I.	Rec	MARC 21: "500".		
encodinganalog="desc				
ription"	Onti	If maded to alonify the continue of	154	
<head></head>	Opt;	If needed to clarify the contents of	154	
	repeatable	the <odd> note, provide the heading</odd>		

Elements and	Status	Comments/Application Notes	Tag	DACS
Attributes		D D : 1	Libra	
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		here. Provide a heading only if the		
		contents of the <odd> note would be</odd>		
		unclear without it. One <head> may</head>		
		be used with each <odd>.</odd>		
<arrangement></arrangement>	MA; not	Provides information about the	46-47	3.2
_	repeatable	arrangement of the collection (into		
	_	series, for example) and/or the filing		
		sequence of the material		
		(alphabetical, chronological, etc.).		
		(
		<arrangement>Arranged in two</arrangement>		
		series: 1. Correspondence		
		(chronological); 2. Subject files		
		(alphabetical by		
		topic).		
		topic).		
		Tayt should be enclosed in newscamen		
		Text should be enclosed in paragraph		
	D	tags; is repeatable.		
	Rec	MARC 21: "351".		
encodinganalog="desc				
ription"				
<fileplan></fileplan>	Opt; not	See the Tag Library for information	144-	4.6
	repeatable	on this element.	145	
<altformavail></altformavail>	Rec; not	Provides researchers with	35-36	6.2
	repeatable	information about alternative formats		
		available, such as microfilm or digital		
		versions. If the whole collection or		
		some of its contents have been		
		digitized, use <daogrp>.</daogrp>		
		5		
		Text should be enclosed in paragraph		
		tags; is repeatable.		
	Rec	MARC 21: "530".		
encodinganalog="relati				
on"				
<accessrestrict></accessrestrict>	Req; not	Provides researchers with	28-29	4.1; 4.2
\accessi \csii ici/	repeatable	information about conditions	20-27	7.1, 7.2
	repeatable			
		governing access. If there are no		
		restrictions on access, repositories are		
		strongly encouraged to a make a		
		statement to that effect, such as:		
1	1	"Open to public research."		
		Text should be enclosed in paragraph		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are surrounded by angle brackets and rendered in boldface		Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	ry	
		tags; is repeatable.		
encodinganalog="rights"	Rec	MARC 21: "506".		
<legalstatus></legalstatus>	Opt; not repeatable	See the Tag Library for information on this element.	170	4.1
<userestrict></userestrict>	MA; not repeatable	Provides information about copyright status or other conditions that affect the use of a collection after access has been provided. In addition to copyright status, this may include limitations or special considerations imposed by the repository, donor, legal statute, or other agency regarding reproduction, publication, or quotation of the described materials. If no use restrictions have been placed on the collection, repositories are strongly encouraged to state that fact in <use <u="" collection="" fact="" in="" of="" s="" stat<="" state="" strong="" td="" that="" the=""><td>259- 260</td><td>4.4</td></use>	259- 260	4.4
encodinganalog="rights"	Rec	MARC 21: "540".		
<pre><pre><pre><pre></pre></pre></pre></pre>	Rec; not repeatable	Provides researcher with a preferred format for identifying or citing the described materials. Text should be enclosed in paragraph tags; is repeatable. MARC 21 encodinganalog="524".	204- 205	7.1.5
<custodhist></custodhist>	Rec; not repeatable	Provides researcher with information about the provenance or chain of ownership of material being described, before they reached the holding repository. Text should be enclosed in paragraph tags; is repeatable. MARC 21 encodinganalog="561".	88-89	5.1

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
<acqinfo></acqinfo>	MA; not repeatable	Identifies the immediate source from which the described materials were acquired by the repository. Includes the date(s) and method(s) of acquisition, along with any nonconfidential information deemed useful by the repository.	31-32	5.2
		Text should be enclosed in paragraph tags; is repeatable.		
		MARC 21 encodinganalog="541".		
<accruals></accruals>	Opt; not repeatable	Provides researchers with information about anticipated additions to materials being described.	30	5.4
		Text should be enclosed in paragraph tags; is repeatable.		
		MARC 21 encodinganalog="584".		
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Rec; not repeatable	Provides researchers with information about processing actions such as accessioning, organizing, describing, preserving, and storing the described materials for research use. <pre> <pre> <pre> <pre> </pre></pre></pre> <pre> Cataloged in 2007 February.</pre> <pre> February.</pre> </pre>	206	8.1
		Text should be enclosed in paragraph tags; is repeatable. MARC 21 encodinganalog="583".		
<separatedmaterial></separatedmaterial>	Rec; not repeatable	Provides researchers with information on materials that have been physically separated or removed.	232- 233	6.3
		Text should be enclosed in paragraph tags; is repeatable.		
		MARC 21 encodinganalog="5440_".		

Elements and	Status	Comments/Application Notes	Tag	DACS
Attributes Elements are surrounded by angle brackets and rendered in boldface		Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Libra ry	
 	Opt; not repeatable	Provides researchers with citations to works that are based on or considered highly relevant to the materials being described. Use the <i>Chicago Manual of Style</i> to formulate bibliographic entries. Inside <bibliography> a bibliographic entry may either be tagged in a simple paragraph element or in a more specific fashion, using <bibref>, <persname>, <title>, <imprint:, etc. There is no single correct way to encode
bibliography>. For additional details, see the Tag Library. MARC 21 encodinganalog="510 581".</td><td>50-51</td><td>6.4</td></tr><tr><td><otherfindaid></td><td>Rec; not repeatable</td><td>Provides researchers with information about additional or alternative guides to the described materials (e.g., creator generated lists, indexes, etc.) Text should be enclosed in paragraph tags; is repeatable. MARC 21 encodinganalog="555".</td><td>191-
192</td><td>4.6</td></tr><tr><td><relatedmaterial></td><td>Rec; not repeatable</td><td>Provides researchers with information about additional materials that are associated to the collection but not related by provenance. The related material may be held in other institutions.</td><td>219-
220</td><td>6.3</td></tr><tr><td>encodinganalog="relati</td><td>Rec</td><td>MARC 21: "5441_".</td><td></td><td></td></tr><tr><td><appraisal></td><td>Opt.; not repeatable</td><td>See the Tag Library for information on this element.</td><td>37-38</td><td>5.3</td></tr><tr><td><controlaccess></td><td>Req;
Repeatable
if nested
within a</td><td>A wrapper element that designates
key access points, preferably taken
from a controlled vocabulary or list,
for the materials described in the</td><td>83-84</td><td></td></tr></tbody></table></title></persname></bibref></bibliography>		

Elements and	Status	Comments/Application Notes	Tag	DACS
Attributes		Dog Dogwins d	Libra	
Elements are		Req=Required MA=Mandatory if applicable	ry	
surrounded by angle brackets and rendered		MA=Mandatory if applicable		
in boldface		Rec=Recommended best practice Opt=Optional		
in bolujuce	single	finding aid. UMA strongly		
	<pre><controlacc< pre=""></controlacc<></pre>	encourages consortium members to		
	ess>	use <controlaccess> elements in their</controlaccess>		
	C35>	finding aids:		
		imaning arasi		
		 To indicate a personal, 		
		family, corporate, or place		
		name with major		
		representation in the		
		materials being described.		
		Names may represent either		
		contributors to the collection		
		(in addition to the creator(s)		
		named in <origination>) or</origination>		
		subjects of the collection;		
		 To indicate major topics, 		
		occupations, functions, or		
		described titles included or		
		associated with a collection.		
		X7		
		You may assign as many controlled		
		access points as needed to represent		
		the names, topics, places, etc. that are		
		determined to be significant in the collection. A minimum of three		
		access points is required for each		
		collection. Controlled subheadings,		
		such as those approved for use with		
		LC subject headings, may be added		
		as needed, separated by a double		
		hyphen (with no spaces between		
		heading terms and hyphens, " ").		
		With the exception of a period		
		needed for an initial in a personal or		
		corporate name, do not end a		
		controlled access heading with a		
		period.		
		In addition, assigning at least one		
		narrow and one broad UMA		
		browsing term (encoded in		
		<pre></pre>		
		source="UMA">) is required.		
	1	bource office / is required.	l	I

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Application Notes Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Libra ry	DACS
		Use one <controlaccess> element as a wrapper for all access points, with additional, specific <controlaccess> tags nested inside. Types of controlled access terms include <persname>, <famname>, <corpname>, <geogname>, <subject>(LCSH), <subject>(UMA browsing terms), <genreform>, <occupation>, <function>, and <title>. For consistent display of headings, group <controlaccess> terms by types, in the order given above. Institutions should use standard sources for name and subject headings when assigning controlled access terms, or standard rules when establishing new controlled access names and terms.</td><td></td><td></td></tr><tr><td></td><td></td><td>When a name, subject, or form/genre heading is taken from a standard name authority source, or a subject or form/genre vocabulary, the SOURCE attribute should contain the standard abbreviation for the source. For names, this is usually lcnaf (LC Name Authority File). For subjects, generally use lcsh (Library of Congress Subject Headings). For other headings use lcsh (Library of Congress Subject Headings), aat (Art & Architecture Thesaurus), or other thesauri. If the name heading or subject term is not found in a standard source, do the</td><td></td><td></td></tr><tr><td></td><td></td><td>following: • Leave the SOURCE attribute blank</td><td></td><td></td></tr></tbody></table></title></function></occupation></genreform></subject></subject></geogname></corpname></famname></persname></controlaccess></controlaccess>		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable	1 J	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
in bonque		 Construct a name heading following an established content standard such as DACS or AACR2 For a subject or form/genre heading, follow the guidelines for constructing new terms in a standard such as the Art & Architecture Thesaurus (AAT) Use the RULES attribute to indicate the content standard by which the name heading or term is constructed (e.g., "lcsh", "dacs", "aat", etc.) If the term is not constructed according to an established content standard, encode the RULES attribute value as "local" 		
		For instructions on assigning UMA browsing terms, see under <subject> UMA browsing terms below.</subject>		
<pre><persname></persname></pre>	MA; repeatable	Access terms related to personal names representing significant subject(s) and/or contributor(s) of the collection. Provide one or more <personame> elements.</personame>	195- 196	2.6; Ch. 9, 12
		Use the form of the name(s) located in a standard authority file, such as Library of Congress Name Authority File or establish the name according to a content standard such as DACS. Controlled subheadings may be added as needed, separated by a double hyphen (with no spaces between heading terms and hyphens, " "). With the exception of a period needed for an initial in a personal name ending, do not end a personal name heading with a period.		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are surrounded by angle		Req=Required MA=Mandatory if applicable	ry	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		TP - OF III III		
		<pre><persname <="" encodinganalog="600" pre=""></persname></pre>		
		source="lcnaf" role="subject">Cluff,		
		Benjamin, 1858-1948		
		Archives		
	Rec	Use "subject" if the name represents		
encodinganalog="subj		a subject of the collection (the		
ect contributor"		MARC ENCODINGANALOG value		
		should be "600"). Use "contributor"		
		if the name is or contributor (the		
		MARC ENCODINGANALOG value should be "700"). If a name		
		functions as both a contributor and a		
		subject of a collection, prepare two		
		<pre><persname> entries for that</persname></pre>		
		individual: one with		
		encodinganalog="subject" and		
		role="subject" to denote the person		
		as a subject, the other with		
		encodinganalog="contributor" and		
		role="photographer" (or another		
		appropriate term) to indicate the		
		person as one of the creators of the		
		collection. Do not list the main		
		creator of the collection in both		
		<origination> and <controlaccess>.</controlaccess></origination>		
	2.64	MARC 21: "600 700".		
source=	MA	Use "lcnaf" if the name is established in the LC Name Authority File. Use		
		in the LC Name Authority File. Use the appropriate abbreviation or code		
		for any other authority from which		
		the heading is taken. If the name		
		does not appear in an authority file,		
		leave blank, and use the RULES		
		attribute to indicate how the name is		
		established.		
rules=	MA	If there is no name authority record		
		available for a particular name,		
		establish the name heading and use		
		"dacs" or "aacr2" to indicate that the		
		name has been formulated according		
		to DACS or AACR2 rules. If the		
		form of the name is not based on a		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req =Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		content standard such as DACS or AACR2, use "local" instead.		
		If the name is taken from a standard name authority file, leave the RULES attribute blank and identify the name authority source in the SOURCE attribute.		
role=	Opt	Use "subject" if the name is a subject		
		of the collection (the MARC		
		ENCODINGANALOG value should		
		be "600"); use "contributor" or other		
		term if the person contributed to		
		creation of the content of the		
		collection (the MARC ENCODINGANALOG value should		
		be "700").		
<famname></famname>	MA;	Access terms related to family names.	140-	2.6;
Standard P	repeatable	Use one or more <famname> elements to represent significant subject(s) and/or contributor(s) of the collection.</famname>	141	Ch. 9; 12.29
		Establish the name according to DACS. State the family surname followed by the word "family." Use the form of the name by which the family is commonly known.		
		Controlled subheadings may be added as needed, separated by a double hyphen (with no spaces between heading terms and hyphens, ""). Do not end the heading with a period.		
		<famname <br="" encodinganalog="subject">rules="dacs" role="subject">Hinckley family Archives</famname>		
encodinganalog="subj ect contributor"	Rec	Use "subject" if the name represents a subject of the collection (the MARC ENCODINGANALOG value		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable	1 y	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
J		should be "600"). Use "contributor"		
		if the name is a contributor (the		
		MARC ENCODINGANALOG value		
		should be "700").		
		If a family name functions as both a		
		contributor and a subject of a		
		collection, prepare two <famname></famname>		
		entries for that family: one with		
		encodinganalog="subject" and role="subject" to denote the family as		
		a subject, the other with		
		encodinganalog="contributor" and		
		role="photographer" (or another		
		appropriate term) to indicate the		
		family as one of the creators of the		
		collection. Do not list the main		
		creator of the collection in both		
		<pre><origination> and <controlaccess>.</controlaccess></origination></pre>		
		MARC 21: "600 700".		
source=	MA	Leave blank and use the rules		
		attribute to indicate that the form of		
		the name follows DACS rules.		
rules=	MA	Use "dacs" to indicate that the name		
		has been formulated according to		
role=	Opt	DACS. Use "subject" if the name is a subject		
1010-	Opt	in the collection. Use "contributor"		
		or other term if the family contributed		
		to the creation of the content of the		
		collection.		
<corpname></corpname>	MA;	Used for access terms related to	85-86	2.6,
	repeatable	corporate and conference names		Ch. 9,
		representing significant subject(s)		Ch. 14
		and/or contributor(s) of the		
		collection.		
		Controlled subheadings may be		
		added if needed, separated by a		
		double hyphen (with no spaces		
		between heading terms and the		
		hyphens, " "). With the exception		
		of a period needed for an initial in a		

Elements and Attributes Elements are	Status	Comments/Application Notes Req=Required	Tag Libra ry	DACS
			ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered in boldface		Rec=Recommended best practice Opt=Optional		
in bolajace		* *		
		corporate name heading, do not end a		
		corporate name with a period.		
		<pre><corpname encoding<="" pre=""></corpname></pre>		
		analog="subject" source="lcnaf"		
		role="subject">Brigham Young		
		University		
	Rec	For an organization use "subject" for		
encodinganalog="subj		the name as a subject of the		
ect contributor"		collection, or use "contributor" for		
•		the name as a contributor to the		
		collection (the MARC		
		ENCODINGANALOG value should		
		be "610" or "710").		
		For a conference or meeting use		
		"subject" for the conference name as		
		a subject of the collection, or use		
		"contributor" for the conference		
		name as a contributor (the MARC		
		ENCODINGANALOG value should		
		be "611" or "711".).		
		If a corporate name functions as both		
		a creator and a subject of the		
		collection, prepare two <corpname></corpname>		
		entries for that body: one with		
		encodinganalog="subject" and		
		role="subject" to denote the		
		corporate body as a subject, the other		
		with encodinganalog="contributor"		
		and role="contributor" (or another		
		appropriate term) to indicate the body		
		as one of the creators of the		
		collection. Do not list the main		
		creator of the collection in both		
		<origination> and <controlaccess>.</controlaccess></origination>		
		MADC 21, "610 611 710 711"		
cource—	MA	MARC 21: "610 611 710 711". Use "lcnaf" if the name is	-	
source=	IVIA			
		established in LC Name Authority		
		File. Use appropriate abbreviation or		
		code for any other authority from		
		which the heading is taken. Leave		
		blank if the name does not appear in		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable	1 y	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
o o tag are e		an authority file and use the RULES		
		attribute to indicate how the name is		
		established.		
rules=	MA	Use "dacs" or "aacr2" to indicate		
Tures	11111	how the name was formulated.		
role=	Opt	Use "subject" if the name is a subject		
1010-	Орг	in the collection		
		(encodinganalog="subject"); use		
		"contributor" or other term if the		
		corporate body contributed to the		
		creation of the content of the		
		collection		
		(encodinganalog="contributor").		
<geogname></geogname>	MA;	Access terms related to places,	152-	Ch. 13
\geogname>	repeatable	natural features, or political	153	CII. 13
	Терешиоте	jurisdictions. Use one or more	133	
		<pre><geogname> tags.</geogname></pre>		
		\geograme> tags.		
		Controlled subheadings may be		
		added as needed, separated by a		
		double hyphen (with no spaces		
		between heading terms and hyphens,		
		" ").		
		<i>)</i> .		
		<geogname< td=""><td></td><td></td></geogname<>		
		encodinganalog="coverage"		
		source="lcsh">United States		
		Foreign relations19th		
	Rec	century MARC 21: "651".		
encodinganalog="cove	Nec	WAKC 21. US1 .		
rage"				
source=	MA	Use "lcsh" if the name is established		
source-	IVIA	in LCSH. Use the abbreviation or		
		code for any other authority under		
		which a heading is taken. If the name		
		is not established, leave blank.		
rules=	MA	If there is no authority record		
Tures—	IVICA	available for a particular place,		
		feature, or jurisdiction name, use "scm" to indicate that the name has		
		been formulated according to the LC		
rolo-"onbigat"	Pag	Subject Cataloging Manual.		
role="subject"	Rec	Use "subject" since the geographic		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Libra ry	DACS
		name is a subject in the collection.		
<subject></subject>	MA; repeatable	Access terms related to topics. Use one or more <subject> tags.</subject>	237- 238	
		Controlled subheadings may be added as needed, separated by a double hyphen (with no spaces between heading terms and hyphens, " ").		
		<pre><subject encodinganalog="subject" source="lcsh">Japanese Americans Evacuation and relocation, 1942- 1945</subject></pre>		
encodinganalog="subj ect"	Rec	MARC 21: "650".		
source=	MA	UMA recommends that repositories use LCSH as the source of subject headings used in finding aids; set SOURCE to "lcsh".		
		Institutions that participated in the Library of Congress SACO program may propose a new heading for inclusion in LCSH if needed. If the term is approved, use it in the <subject> element and set the SOURCE to "lcsh".</subject>		
rules=		Leave blank.		
<subject> UMA browsing terms</subject>	Req; repeatable	To facilitate browsing of collections included in the UMA union database, encoders should add topical "browsing" terms as appropriate to the materials described. Only use terms included on the list of UMA browsing terms. Assign terms that represent important topics in the collection.		
		As appropriate to the intellectual content of the described materials, assign at least one narrow UMA browsing term, along with its broader		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
		Dog Dogwined		
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable		
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		parent term, to the finding aid. More		
		terms may be assigned as needed.		
		When a narrow term is assigned, its		
		broad parent term must also be		
		assigned. If several terms from one		
		broad category are assigned, it is only		
		necessary to assign the parent term		
		once.		
		Use the SOURCE attribute to		
		distinguish a broad term from a		
		narrow term: For a broad term, enter		
		"umabroad" in the SOURCE		
		attribute, and for a narrow term, enter		
		"umanarrow" in the SOURCE		
		attribute.		
		attribute.		
		The assigned UMA browsing terms		
		should be nested inside a		
		<pre><controlaccess> wrapper element.</controlaccess></pre>		
		Note that all UMA browsing terms		
		are placed in <subject>, even</subject>		
		geographic and occupation terms. Do		
		not use subheadings. Do not end		
		with a period.		
		<controlaccess><subject< td=""><td></td><td></td></subject<></controlaccess>		
		altrender="nodisplay"		
		source="umabroad">Social Life and		
		Customs <subject< td=""><td></td><td></td></subject<>		
		altrender="nodisplay"		
		source="umanarrow">City and Town		
		Life		
		Life subject		
		<subject <="" altrender="nodisplay" td=""><td></td><td></td></subject>		
		source="umabroad">Religion <td></td> <td></td>		
		ct> <subject <="" altrender="nodisplay" td=""><td></td><td></td></subject>		
		source="umanarrow">Mormonism		
		(Church of Jesus Christ of Latter-day		
		Saints)		
	Req	The browsing terms are not displayed		
altrender="nodisplay"	IX.Y	in the finding aid; rather, they appear		
articidei – nodispiay		on the UMA website as browsing		
		headings under which are grouped all		
		of the collections that include		
		of the conections that include		

Elements and Attributes	Status	Comments/Application Notes	Tag Libra	DACS
Elements are		Req=Required	ry	
surrounded by angle		MA=Mandatory if applicable	13	
brackets and rendered		Rec=Recommended best practice		
in boldface		Opt=Optional		
		materials significant to that topic.		
source="umabroad	Req	For each broad term assigned, enter		
umanarrow"	2004	"umabroad" and for each narrow		
		term assigned, enter "umanarrow."		
rules=		Leave blank.		
<genreform></genreform>	Rec;	Access terms related to genre or form	150-	
Sgem etvinis	repeatable	terms. Use one or more <genreform> tags to list major genres and/or forms of material represented in the materials described. Controlled subheadings may be added as needed, separated by a double hyphen (with no spaces between heading terms and hyphens, " "). <genreform <="" encodinganalog="type" td=""><td>151</td><td></td></genreform></genreform>	151	
		source="aat">Reports		
encodinganalog="type"	Rec	MARC 21: "655".		
source=	Rec	Encode appropriate code for source found in the Library of Congress' Term, Name, and Title Sources Code List.		
rules=		Leave blank.		
<occupation></occupation>	Rec; repeatable	Access terms related to types of work or professions. Use one or more <occupation> tags. Controlled subheadings may be added as needed, separated by a double hyphen (with no spaces between heading terms and hyphens, " "). <occupation< td=""><td>183- 184</td><td></td></occupation<></occupation>	183- 184	
		encodinganalog="subject" source="lcsh">College teachers Utah		
encodinganalog=" subject "	Rec	MARC 21: "656".		
source=	Rec	Encode appropriate code for source		

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional found in the Library of Congress'	Tag Libra ry	DACS
		Term, Name, and Title Sources Code List.		
rules		Leave blank.		
<function></function>	Rec; repeatable	Access terms related to spheres of activity and/or processes that generated the described materials. Controlled subheadings may be added as needed, separated by a double hyphen (with no spaces between heading terms and hyphens, " "). <function encodinganalog="subject" source="aat">PlanningCities and towns</function>	148- 149	
encodinganalog="subj	Rec	MARC 21: "657".		
source=	Rec	Encode appropriate code for source found in the Library of Congress' Term, Name, and Title Sources Code List.		
rules=		Leave blank.		
<title></td><td>MA;
repeatable</td><td>Access terms related to titles of published works to which a collection is related, such as monographs, serials, or paintings represented prominently in the collection. <title render="italic" encodinganalog="title" source="letah">Provo daily herald</title> MARC 21 encodinganalog="630 730 740" Encoding analog 630 will be used to provide subject access to collections with material about a given published work.	246- 247			

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Comments/Application Notes Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Libra ry	DACS
		Encoding analog 740 will be more frequently used for standardized forms of titles contained within a collection.		
		Encoding analog 730 will be used very rarely. 730 is used in the case where a text of the work is contained in the collection being described, there is no known author, and a Uniform Title heading has been established in LC Name Authority File.		
source=	MA	Use "lctah" when a title is established in LC Title or LC Name Authority Headings file. Use abbreviation or code for any other authority from which heading is taken. If a title is not established, leave blank.		
rules=	MA	Use "aacr2" if the title is not taken from a an authorized source as described above, but is formulated according to AACR2.		

Although not required for UMA core finding aids, if an inventory (i.e., container list) will be encoded as part of the finding aid, observe the guidelines in Table 3, below.

Table 3: <dsc> (Component Hierarchy)

Elements and Attributes Elements are surrounded by angle brackets and rendered in boldface	Status	Req=Required MA=Mandatory if applicable Rec=Recommended best practice Opt=Optional	Tag Librar y	DAC S
<dsc></dsc>	Req; not repeatable	A wrapper element that bundles information about the hierarchical arrangement of the materials being described. The <dsc> element surrounds all other (subordinate) elements in the Description of Component Parts section of the finding aid. A single <dsc> should be used with nested components in which descriptions for series, subseries, items, and otherlevel (as reflected in the intellectual arrangement of the collection) are placed at the appropriate level in the component hierarchy.</dsc></dsc>	109- 113	
type="combined analyticover in-depth"	Req	While UMA does not prescribe a particular type of component part presentation, it strongly encourages repositories to use the "combined" approach, where each major subdivision is described and immediately followed by a container list at one or more narrower levels. "Combined" facilitates stylesheet manipulation of multi-level finding aids. For finding aids that include a narrative description of major subdivisions, such as series and subseries, but that lack an itemlevel container list, use "analyticover." For finding aids that lack any major subdivisions and consist only of a high-level description followed by an item-level container list, use "in-depth".		
<c0x></c0x>	Req;	Encoders must use number (<c01></c01>	61-62	

level="recordgrp collection subgrp series subseries file item otherlevel" or otherlevel="accession sub-subseries sub-file"	Req	through <c12>) component elements. Nested <c0x>s should be used as needed to reflect the intellectual structure of the archival materials. The full suite of subelements and attributes described are available at each component level (e.g., all elements described in Table 2, top-level <archdesc> elements, may be used as need in each component described in <dsc>). UMA has defined the following levels, as reflected in the arrangement of the collection: "subgrp", "series", "subseries", "file", and "item". Use one of these terms for each level of the <c0x> structure. A level designation of "subseries" or "file" may be repeated in a subsequent <c0x>; i.e., it is acceptable to nest a subseries within a subseries, or a file within a file. Encoders may simply repeat the term "subseries" or "file" in the nested LEVEL attribute, or they may add the prefix "sub" to either term ("sub-subseries" or "sub-file"). If the prefix is used, however, the attributes must be encoded as follows: <c04 for="" internal="" level="otherlevel" linking="" otherlevel="sub-subseries>" otherlevel"="" subseries="" th="" the="" the<="" used="" within=""><th></th><th>Ch. 1</th></c04></c0x></c0x></dsc></archdesc></c0x></c12>		Ch. 1
	Opt	used for internal linking within the finding aid.		
<did></did>	Req; not repeatable	A required wrapper element that bundles other elements identifying core information about the described materials.	103- 105	
<unitid></unitid>	MA; not repeatable	Unique identities should be encoded as <unitid> rather than <container> or <unititle>. (e.g., <unitid>Series X</unitid>).</unititle></container></unitid>	255- 256	2.1.3
	Rec	MARC 21: "099".		

encodinganalog="identifier"				
<container></container>	MA, repeatable	Information about containers (usually types of containers and container numbers) should be given at the file and/or item levels (the lowest level of a hierarch), even if doing so results in repetition of container information in multiple file-level or item-level entries. Do not assume that container information given at a higher level will be inherited by lower levels. If a series, for example, contains multiple file-level entries, provide <container> information for each of the file-level entries. In finding aids that contain only higher-level component descriptions, such as series or subseries-level data, however, container information may be provided at the appropriate broader level. As needed, two or three <container> elements may be used in a given <c0x> entry. For guidance on encoding complex container information, see the TYPE attribute below.</c0x></container></container>	80-82	2.5
type=	MA	Use of the TYPE attribute is mandatory if applicable to identify the type of physical container(s) used to house the collection. Use any of the following designations, such as: "box", "carton", "folder", "box-folder", "item", "reel", "frame", "oversize", reel-frame", "volume", "album", "page", "mapcase", "folio", or "verticalfile". In determining whether to use one or two <container> elements in a given <c0x> entry, use the following rule of thumb. All data of the same TYPE should be entered in a single <container> element. It is also acceptable to enter two types of container data into a single <container> element.</container></container></c0x></container>		

	For example, a repository may	
	elect to record "box" and "folder"	
	information in two separate	
	<container> elements, each one</container>	
	containing a different container	
	type:	
	<container th="" <=""><th></th></container>	
	type="box">8	
	<pre><container type="folder">8-</container></pre>	
	10	
	On both toward more has combined in	
	Or both types may be combined in a single <container> element using</container>	
	a combination term such as "box-	
	folder":	
	101401	
	<pre><container type="box-folder">8/8-</container></pre>	
	10	
	However, do not use two	
	<container> elements for</container>	
	information of the same TYPE,	
	even to record complex	
	information. Rather, enter the	
	complex information into a single	
	<container> element. In the</container>	
	following example, the material	
	described is contained in box 4,	
	folder 10 through box 6, folder 3.	
	Acceptable:	
	<pre><container type="box-</pre></th><th></th></tr><tr><th></th><th>folder">4/10-6/3</container></pre>	
	Or	
	<container type="box-</th><th></th></tr><tr><th></th><th>folder">4/10-15, 6/1-</container>	
	3	
	Or	
	<pre><container type="box- folder">4/10-15 to 6/1-</container></pre>	
	3	
	5 Container	
	But not:	
	<pre><container type="box-</pre></th><th></th></tr><tr><th></th><th>folder">4/10-15</container></pre>	
	<pre><container type="box-folder">6/1-</container></pre>	
	3	
<origination> MA; r</origination>		_
repeat		.6; .h. 9

		at the <archdesc> or in a parent level.</archdesc>		
4	N/A			
<pre><persname> </persname></pre>	MA;	<pre><persname>: Proper name of an</persname></pre>		
<famname> <corpname></corpname></famname>	repeatable	individual (lastname, firstname—		
<name></name>		Smith, Joseph, 1805-1844),		
		or <famname>: Proper name of</famname>		
		family (direct word order—Smoot		
		family),		
		or <corpname>: Proper name of</corpname>		
		organization/agency (direct word		
		order—Weber State University),		
		or name of conference or meeting,		
		exhibition, expedition, athletic		
		contest, fair, etc. (see <corpname></corpname>		
		in the Tag Library for more		
		details).		
		Use LC name authority if possible		
		or formulate according to DACS		
		or AACR2 rules.		
	Rec	When using MARC encoding		
encodinganalog="creator"		analogs, use "100" for personal or		
		family names, "110" for corporate		
		names, and "111" for meeting		
		names of the primary creator of the		
		materials. Any additional creators		
		should be given 7XX encoding		
		analogs.		
		MARC 21: "100 110 111 700		
		710 711".		
source=	Rec	Set to "lcnaf" when name is		
		established in the LC Name		
		Authority File (LCNAF). If not in		
		LCNAF, establish using AACR2		
		or DACS and state which was used		
		in the RULES attribute.		
rules=	Rec	Set to "aacr2" or "dacs" when the		
		name is not established in LCNAF.		
role=	Rec	Usually "creator", "collector", or		
		"photographer".		
<unittitle></unittitle>	Rec; not	It is strongly recommended that	257-	2.3
	repeatable	titles be used at the component	258	
		level. If a title is not provided		
		because it has already been stated		
		in a previous entry (and it is meant		
		to be "inherited" by succeeding		
		entries), but dates are provided, a		
		<unittitle> element is not required;</unittitle>		
		rather, it is acceptable to place the		

	Rec	date(s) inside <unitdate>. For examples, for a series titled "Correspondence," subseries titles are not required if "Correspondence" is assumed to apply to all entries in the series. Dates or date spans would be encoded in <unitdate> at the subseries level. Do not nest <unitdate> inside <unittitle>. MARC 21: "245\$a".</unittitle></unitdate></unitdate></unitdate>		
encodinganalog="title" <unitdate></unitdate>	Rec; Repeatable	Strongly recommended if a more specific creation date can be provided for a component than given in its parent description. If multiple date ranges are present, each should be encoded with its own <unitdate>. If no date is available or applicable for a particular component, use the term "undated" inside the <unitdate> tags. Where no <unittitle> content exists (or if a <unittitle> is meant to be "inherited" by succeeding entries), but dates are provided, do not include a <unittitle> element; instead, simply place the date(s) inside <unitdate>. Do not nest <unitdate> inside <unittitle>.</unittitle></unitdate></unitdate></unittitle></unittitle></unittitle></unitdate></unitdate>	253- 254	2.4
type="inclusive bulk"	Opt			
era="ce"	Opt			
calendar="gregorian"	Opt			
normal=	Opt	Enter the date or date range in ISO 8601 format.		
anaadinaanala - "1-4-"	Opt	MARC 21: "245\$f".		
encodinganalog="date" <physdesc></physdesc>	Rec; repeatable	A wrapper element for physical details about the described materials. Use subelements <extent>, and if desired, <physfacet>, <dimensions>, and <genreform> to record the</genreform></dimensions></physfacet></extent>	198	2.5

		information.		
<extent></extent>	Rec; repeatable	At the series or subgroup component level, extent should be encoded here rather than in	131- 132	2.5
		<unittitle> or another element.</unittitle>Units of measure should be expressed as part of the content of		
	_	this element.		
encodinganalog="format"	Opt	MARC 21: "300\$a".		
<langmaterial></langmaterial>	Rec; not repeatable	A prose statement naming the language(s) of the materials in the collection or unit. One or more language name(s) are enclosed in nested <language> tags.</language>	164- 165	4.5
<language></language>	Rec; repeatable	Subelement of <langmaterial> within which the language of the materials being described is specified.</langmaterial>	166- 167	4.5
		<langmaterial>Correspondence in <language langcode="eng">Englishe> and <language langcode="fre">French</language >.</language </langmaterial>		
langcode=	Opt	Consult ISO 639-2b for the correct language code(s)		4.5
encodinganalog="language"	Opt	MARC 21: "546".		
 	Rec; not repeatable	At highest component levels, such as subgroup or series levels, biographical or administrative history information should be included if available <i>and</i> if the information is different from the collection-level bioghist> note.		2.7, Ch. 10
		paragraph tags; is repeatable.		
encodinganalog="description"	Opt	MARC 21: "5450_ 5451_".		
<scopecontent></scopecontent>	Rec; not repeatable	At highest component levels, such as subgroup or series levels, scope and content information should be included. Other levels (folder or	229- 231	3.1

encodinganalog="descriptio"	Opt	item) may include scope and content notes as needed. Use <scopecontent> instead of <abstract> or <note> tags. MARC 21: "520".</note></abstract></scopecontent>		
<accessrestrict></accessrestrict>	MA; not repeatable	Provides researcher with information about conditions governing access. If materials have no restrictions on accession, repositories are encouraged to use the following statement: "Open to public research." Text should be enclosed in paragraph tags; is repeatable.	28-29	4.1
encodinganalog="rights"	Opt	MARC 21: "506".		
<userestrict></userestrict>	Rec; not repeatable	Provides information about copyright status or other conditions that affect the use of a collection after access has been provided. In addition to copyright status, this may include limitations or special considerations imposed by the repository, donor, legal statute, or other agency regarding reproduction, publication, or quotation of the described materials. Text should be enclosed in paragraph tags; is repeatable.	259- 260	4.4
encodinganalog="rights"	Opt	MARC 21: "540".		
<note></note>	Opt; not repeatable	A generic note element that provides a short comment, such as citing the source of a quotation or justifying an assertion. Do not confuse with <odd>, which may be used within <archdesc> or <c0x> for information that is more than a short comment. Text should be enclosed in paragraph tags; is repeatable.</c0x></archdesc></odd>	179- 180	

NOTE	All other elements that may be
	used in the top-level <archdesc>,</archdesc>
	including <arrangement>,</arrangement>
	<altformavail>, <odd>, etc. may</odd></altformavail>
	be used as needed in <dsc>.</dsc>

Table 4: UMA Core Finding Aid

The EAD elements listed below comprise the minimal number of elements mandated by UMA for inclusion in the UMA finding aids database; i.e. all elements that have the status **Req** in the Best Practice Guidelines.

This UMA Core Finding Aid reflects a single level of description and may be appropriate for:

- Small collections or single items
- Large homogenous collections
- Collections that are not yet fully processed or are not expected to be processed for some time

For more detailed instructions regarding the elements listed below, including attributes required in these elements, see Tables 1 and 2 of the UMA Best Practice Guidelines.

```
<ead>
   <eadheader>
       <eadid>
       <filedesc>
           <titlestmt>
               <titleproper>
               <date>
               <titleproper> [Filing title]
               <sponsor>
           <publicationstmt>
               <publisher>
               <address>
                   <addressline>
               <date>
       cprofiledesc>
           <langusage>
               <language>
   <archdesc>
       <did>
           <repository>
               <corpname>
           <unitid>
           <unittitle>
           <unitdate>
           <physdesc>
               <extent>
           <abstract>
           <langmaterial>
       <scopecontent>
       <accessrestrict>
       <controlaccess>
           <subject> [UMA browsing term]
```

Sources used to compile this document include:

- Encoded Archival Description Tag Library (Version 2002)
- Northwest Digital Archive Best Practice Guidelines for EAD 2002 (Version 3.3)
- RLG Best Practice Guidelines for Encoded Archival Description (August 2002)
- Online Archives of California (OAC) Best Practice Guidelines for Encoded Archival Description (February 2005, reviewed and updated annually)
- Describing Archives: A Content Standard (2004)
- ISAD(G): General International Standard Archival Description (September 1999)

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