# Consortium of Church Libraries and Archives
## Best Practices Guidelines for Encoded Archival Description (EAD), version 1.5.1
## (CCLA BPG)

**Introduction**

The *CCLA Best Practice Guidelines for Encoded Archival Description (EAD)* must be followed when contributing finding aids to the CCLA finding aids database. Institutions should follow the current guidelines for all *newly* encoded finding aids.

These guidelines were prepared by the CCLA EAD Working Group during the winter of 2006, and were revised during 2010. The guidelines are adapted from the RLG Best Practice Guidelines for Encoded Archival Description (2002), the Northwest Digital Archive Best Practice Guidelines for EAD 2002 Version 3.1, and the Online Archive of California Best Practice Guidelines Version 2.0.

The purpose of the CCLA BPG EAD is to:

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

**Context**

These guidelines are based on the EAD 2002 Schema for archival finding aids maintained by the Society of American Archivists (SAA). The CCLA BPG EAD supplements the EAD Tag Library and the EAD Application Guidelines, available from SAA, by defining a core set of practices for encoding a subset of EAD elements required or recommended for use in finding aids contributed to the CCLA finding aids database. Refer to these SAA publications for official definitions of EAD elements and attributes as well as examples of how to use various elements and attributes.

The guidelines are informed by the current U.S. data content standard for archival description *Describing Archives: a Content Standard* (DACS) and conform to the General International Standard Archival Description (ISAD(G)).

**Multilevel description**

Four fundamental rules of multilevel description guide the description of archival materials (see the "Statement of Principles" in DACS). These rules should serve as overarching guidelines for all archival descriptions submitted to the CCLA finding aids database:

- All archival description should be presented 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 will determine 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 CCLA institution's available resources and user needs will drive the level of detail of its finding aids. The models presented in the CCLA BPG EAD are based on the typical archival finding aid for personal papers or organizational records 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 XML, and all encoding must conform to XML encoding specifications. More information on XML is available on the World Wide Web Consortium (W3C) website. EAD uses an XML Schema that is maintained by the Library of Congress and SAA to enforce structural consistency in all EAD-tagged finding aids. The EAD Schema defines main *elements,* child elements, and *attributes* of elements. Some elements, such as <titlestmt> in the EAD header <eadheader>, serve exclusively or primarily 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."

**Terminology and Conventions Used**

- "Tag" refers to the XML markers that enclose an element's data value (i.e., <…> and </…>
- "Element" refers to an individual EAD datum, represented in markup by a start tag <…> and end tag </…>
- "Attribute" refers to named properties of an element that may have different values; attributes qualify elements. Attribute names are rendered in SMALL CAPITAL LETTERS throughout these guidelines. The relationship between an attribute name and the information (or "value") it contains is show by an equals sign =. Quotation marks surround the data value. (i.e. source="lcsh" where "source" is the attribute name and "lcsh" is the attribute value)
- "Encoding analog" refers to the suggested mapping of an EAD element to an equivalent element or field in another standard metadata schema, such as MARC 21 or Dublin Core. Each collection described in a finding aid in the CCLA finding aids database must be represented by a MARC record in a major bibliographic utility. For this reason information has been included in the top-level <archdesc> that indicate which elements may be mapped to MARC 21 fields. By default, however, fields are mapped to Dublin Core elements to facilitate aggregation using the Open Archives Initiative Preservation Metadata Harvesting (OAI-PMH) protocols.
- "Status" indicates whether an element (and certain of its accompanying attributes) is required or not. The following codes are used to represent element status
  - **Req**=Required. This EAD tag is required at this level.
  - MA=Mandatory when applicable. This EAD tag is mandatory when the information is available or discernable at this level.
  - Rec=Recommended. This EAD tag is strongly recommended in order to facilitate access to a collection.
  - Opt=Optional. The EAD tag may be used if desired.

All finding aids contributed to the finding aids database made available by Brigham Young University must comply with guidelines for elements that are designated "Required" and "Mandatory when applicable."

**Order of Elements**

The EAD Schema requires that certain elements be encoded in a set sequence. The CCLA Best Practice Guidelines also present EAD elements in a preferred sequence for finding aids. While the CCLA preference is not prescriptive (another sequence may be used if it adheres to the EAD Schema), consistency in the ordering of the elements facilitates the review and formatting of finding aids for Web display.

**Recursion and Repeatability**

Many EAD elements may be used recursively (i.e., nested) as allowed by the EAD Tag Library. Nesting one type of element within a different type of element is also addressed by the EAD Tag Library (see the "May contain" section of each element description), but the CCLA has set several additional limits on such nesting. For example, the CCLA Best Practice 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 CCLA BPG-compliant finding aids. When <p> (paragraph) is allowed in an element, it may be repeated as often as necessary (e.g. within <bioghist>, <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 within a finding aids repository. Because there is no formal element within EAD designated for this purpose, CCLA 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 CCLA requires that names of months and terms reflecting estimation (i.e., "circa") be spelled out rather than abbreviated. CCLA 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.

Dates that are normalized must comply with the International Organization for Standardization (ISO) 8601 standard, using the "Basic Format" of the W3C *Date and Time Formats* 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 "circa" 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="circa" 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="circa" 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="circa" 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 CCLA 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, 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 CCLA 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 CCLA 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):
<resource xlink:type="resource" xlink:label="start"></resource>

• 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:

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

**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 CCLA 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 CCLA 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> Pointer or <ref> Reference elements. Note that whereas <ptr> is an empty internal linking tag (it can contain no text, i.e.), <ref> can include text and subelements that identify or describe the referenced object for the user. In either the <ptr> or the <ref> element, use the TARGET attribute to establish 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> or <ref> element's TARGET attribute. Make sure, then, to enter an identifying number or other text string in the ID attribute of that destination element. The number or text string used as an ID must be in lower case, contain no spaces, and uniquely identify the element within the finding aid.

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

**<arrangement encodinganalog="description">**

**&lt;p&gt;Arranged in three series: &lt;ref xlink:type="simple" xlink:href="#series1"&gt; 1. Abraham O. Smoot correspondence&lt;/ref&gt;. 2. Subject files….&lt;/p&gt;**
**&lt;/arrangement&gt;**

Note that the &lt;c01&gt; component-level description for the Abraham O. Smoot correspondence series in this example must contain an ID attribute that has the same value as that referenced in the &lt;ref&gt; element's TARGET attribute:

**…**
**&lt;c01 level="series" id="series1" &gt;**
**&lt;did&gt;**
**&lt;unittitle&gt;Abraham O. Smoot correspondence&lt;/unittitle&gt;**
**…**
**&lt;/did&gt;**
**…**
**&lt;/c01&gt;**

**External linking:** All external linking (i.e., linking from the finding aid to a resource other than the finding aid) should be encoded using &lt;extptr&gt; Extended Pointer, &lt;extref&gt; Extended Reference, or &lt;archref&gt; Archival Reference elements. Note that whereas &lt;extptr&gt; is an empty external linking tag, &lt;extref&gt; 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 &lt;relatedmaterial&gt; note:

**&lt;relatedmaterial &gt;**
  **&lt;p&gt;To search and view the Library of Congress HABS and HAER collections online, visit**
**&lt;extref xlink:type="simple" xlink:role="text/html" xlink:show="new" xlink:actuate="onRequest"**
**xlink:href="http://memory.loc.gov/ammem/collections/habs_haer/"&gt;Built in America&lt;/extref&gt;. Visit the National Park Service online to learn more about &lt;extref xlink:type="simple" xlink:role="text/html" xlink:show="new" xlink:actuate="onRequest"**
**xlink:href="http://www.cr.nps.gov/habshaer/"&gt;HABS and HAER&lt;/extref&gt;.&lt;/p&gt;**
**&lt;/relatedmaterial&gt;**

**Linking to another finding aid:** To link to a related finding aid, provide in the HREF attribute in &lt;extref&gt; the complete URL.

Linking to a CCLA 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 CCLA 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

**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 &lt;archdesc&gt;, but including collection or record group in component-level description is permitted by the EAD Schema and the CCLA EAD 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 Schema

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 CCLA BPG EAD 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.

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 &#x00E9;migr&#x00E9;s.**

*Note*: "&#x00E9;" 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 | &amp; |
| < | Left angle bracket | &lt; |
| > | Right angle bracket | &gt; |

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**

CCLA 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 CCLA stylesheets or locally developed stylesheets. There are exceptions to this general recommendation, however (see, for example, the use of the <head> element in <bioghist>).

CCLA 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 in the Brigham Young University repositories. .

**Punctuation, White Space, and Empty Elements**

CCLA recommends that encoders do not provide punctuation *between* elements (such as between <unittitle> and <unitdate>). This information is supplied by the CCLA stylesheets or locally developed stylesheets. Punctuation is acceptable *within* a given element.

Encoders should avoid adding extraneous white space within finding aids. Similarly, as the final step in the editing process before submission to the CCLA 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 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".

**<bioghist encodinganalog="description">**
**<p>Robert Monsen was the editor of the <title render="doublequote">Utah Business Review</title> for ten years…<p>**
**<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 CCLA 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 CCLA stylesheet before deciding to format specific text strings with the <emph> element.

**Text Used in Attributes**: *All* text used as attribute values should be entered in lower case to comply with the EAD Schema, which mandates that element and attribute names 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 **&amp;** 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/&amp;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 CCLA has established the following file naming requirements for finding aid files:

·      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).

·       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:

**HLaB_MSSH558.xml   HLaB is the MARC code for Brigham Young University-Hawaii, MSSH558 is the collection number assigned to the collection by the Brigham Young University-Hawaii 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 a 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 CCLA EAD BPG mandates encoding that is largely independent of a particular online or printed display. CCLA BPG-compliant encoding can be manipulated and repurposed through the application of customized stylesheets, such as a local stylesheet, or the CCLA stylesheets, 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 CCLA stylesheets do not display any element qualified with an AUDIENCE value of "internal" for any purpose, but CCLA 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 CCLA 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 CCLA participants encoding at the container level (often carton level) for minimally processed or unprocessed collections, the Best Practices Working Group strongly encourages CCLA 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>Franklin S. Harris correspondence and lecture notes</unittitle>
      <unitdate>circa 1945-1953</unitdate>
    </did>
    <scopecontent><p> [if desired] </p></scopecontent>
  </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.:

```
<archdesc level="collection" type="inventory" relatedencoding="dc"> ...
  <processinfo >
    <p>These records have been arranged into broad, series-level groupings. More detailed processing is not anticipated.</p>
  </processinfo>
...

</archdesc> ...
```

Alternately, CCLA archivists may process and describe papers and records to the series level. This would benefit researchers and also ensure that the CCLA 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:

```
<dsc type="analyticover">
  <c01 level="series">
    <did>
      <unitid encodinganalog="identifier"> [if applicable] </unitid>
      <container type="box">1-3</container>
      <unittitle>Reports</unittitle>
      <unitdate normal="1945/1962">1945-1962</unitdate>
    </did>
    <scopecontent><p> [if desired -- e.g., Annual and financial reports document ...] </p></scopecontent>
  </c01>
  <c01 level="series">
...
</dsc>
```

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

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

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | | | |
| \<?xml version="1.0" encoding="utf-8"?\> | **Req**; not repeatable | XML declaration | | |
| **\<ead\>** | **Req;** not repeatable | Outermost wrapping element for an EAD-encoded finding aid. | 115-116 | |
| xmlns="urn:isbn:1-931666-22-9" | **Req**; not repeatable | Name space declaration for the EAD schema. | | |
| xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" | **Req**; not repeatable | Name space declaration for the XML schema itself. | | |
| xmlns:xlink="http://www.w3.org/1999/xlink" | **Req**; not repeatable | 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 CCLA EAD repository. | | |
| xsi:schemaLocation="urn:isbn:1-931666-22-9 http://www.loc.gov/ead/ead.xsd" | **Req**; not repeatable | 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 CCLA EAD repository. | | |
| relatedencoding= | Opt | Note: In most cases, RELATEDENCODING attributes will not be set in \<ead\>, but rather in the \<eadheader\> and \<archdesc\> elements. Most institutions will map each of these to elements to a different encoding system (such as Dublin Core in \<eadheader\> and MARC21 in \<archdesc\>). If both of those elements map to the same encoding system, however, the value could be set in \<ead\>. | | |
| **\<eadheader\>** | **Req;** not repeatable | Wrapper element for information about the finding aid document, rather than the archival materials being described in the bulk of the finding aid. | 119-120 | |
| 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 metadata system to which \<eadheader\> elements can be mapped. The intention of the \<eadheader\> elements is to provide more robust and uniform discovery metadata about the finding aid. | | |
| repositoryencoding="iso15511" | **Req** | Refers to the standard being used for authoritative repository codes. | | |

| 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 Library | DACS |
|---|---|---|---|---|
| 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 formats. | | |
| **<eadid>** | **Req;** not repeatable | EAD identifier. The content of this element, together with its attributes, most uniquely identify the EAD finding aid document. | 121 | |
| countrycode="US" | **Req** | State in ISO 3166-1 format. Usually ""US"" (United States) for CCLA participants. | | 2.1.5 |
| mainagencycode= | **Req** | Use the repository 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 each.<br><br>*For CCLA institutions, the MARC codes are as follows: UPB (BYU Provo), IdRR (BYU Idaho), USlC (Church Historian's Office), and HLaB (BYU Hawaii).* | | 2.1.4 |
| publicid= and/or identifier= and/or url= | **Req** | The <eadid> for CCLA finding aids should include at least one of the following (CCLA recommends the use of a PUBLICID):<br>1.   PUBLICID: defined in ISO/IEC 9070, 1991, intended to be universally unique. ISO 9070 provides rules for formulating Formal Public Identifiers (FPIs). See the *Online Archive of California's OAC Best Practice Guidelines for Encoded Archival Description*, Appendix B for instructions on structuring FPIs. The basic format is: publicid="-//Name | | |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | of owner::subordinate named division of owner//TEXT (Country cod::National repository code::local repository reference code::Title of archival unit)//EN"<br><br>2.   IDENTIFIER: a machine-readable persisent and unique identifier.<br><br>3.   URL: the complete URL of the finding aid. Should be expressed in absolute (not relative) terms. | | |
| encodinganalog="identifier" | MA | Maps Dublin Core element. | | |
| **<filedesc>** | **Req;** not repeatable | Wrapper for bibliographic information about the finding aid. | 142-143 | |
| **<titlestmt>** | **Req;** not repeatable | Wrapper for finding aid title information. | 252 | |
| **<titleproper>** | **Req;** not repeatable | Use for the formal title of the *finding aid*, 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>** | Rec; repeatable | Use <date> element within the <titleproper> element. Use to encode span dates of described materials (e.g., 1899-1974). | 97-98 | |
| era="ce" | Opt | | | |
| calendar="gregorian" | Opt | | | |
| normal= | Opt | Enter normalized span dates in ISO 8601 format (e.g. 1899/1974). | | |
| encodinganalog="date" | Opt | Mapped Dublin Core element. | | |
| **<titleproper>[filing title]** | **Req;** not repeatable | Encode the *filing title* of the collection being described. Note that the filing title is a modified form of the title used for sorting lists of collection titles.<br><br>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 | | |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | parentheses:<br><br>Wilkinson (Ernest L.) papers<br>Smoot (Abraham Owen) papers<br>Facer (Joseph) correspondence<br><br>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:<br><br>Harris (Franklin S. and Estelle) papers<br><br>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:<br><br>Westwood (Paul Bradford) and Daines (J. Gordon) collection<br><br>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:<br><br>Provo Police Dept. records<br>Springville photograph collection<br>Nimer family diaries<br>Albertsons, Inc. records | | |
| type="filing" | **Req** | Indicates that this instance of <titleproper> is intended for filing 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>** | MA; not repeatable | 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>** | MA; not repeatable | CCLA members should acknowledge outside financial help, if appropriate. | | |
| encodinganalog="contributor" | Opt | Mapped Dublin Core element. | | |
| **<editionstmt>** | Opt; not repeatable | Holds information about the edition of the finding aid. | 123-124 | |
| **<publicationstmt>** | **Req;** not | Wrapper for information about | 213 | |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | repeatable | publication or distribution of finding aid. | | |
| **\<publisher\>** | **Req;** not repeatable | Name of publisher or distributor of finding aid. | 214 | |
| encodinganalog="publisher" | **Req** | Mapped Dublin Core element. | | |
| **\<address\>** | **Req;** repeatable | Wrapper element for the lines of address that comprise the address of the repository. | 33 | |
| **\<addressline\>** | **Req;** repeatable | Multiple \<addressline\> elements may be used as needed to provide street address, city, state, zip, phone, fax, email address, and repository URL. | | |
| **\<date\>** | **Req;** repeatable | Date of publication or copyright of the finding aid. | 97-98 | |
| era="ce" | Rec | | | |
| calendar="gregorian" | Rec | | | |
| normal= | Rec | Enter normalized publication or copyright date in ISO 8601 format (e.g., 2007). | | |
| encodinganalog="date" | **Req** | Mapped Dublin Core element. | | |
| **\<seriesstmt\>** | Opt; repeatable | Wrapper for information about published monographic series, if any, to which the finding aid belongs. | 234 | |
| **\<notestmt\>** | Opt; not repeatable | Wrapper for general notes describing the finding aid. | 181 | |
| **\<profiledesc\>** | **Req;** not repeatable | Wrapper for information about encoded version and language(s) of finding aid. | 207-208 | |
| **\<creation\>** | MA; not repeatable | Statement about the encoding of the finding aid. Generally include at least the name of the encoder(s), if known. | 87 | |
| **\<date\>** | Rec; not repeatable | Date of the *initial* encoding in EAD. | 97-98 | |
| era="ce" | Rec | | | |
| calendar="gregorian" | Rec | | | |
| normal= | **Req** | Enter normalized publication or copyright date in ISO 8601 format (e.g., 2007). | | |
| **\<langusage\>** | **Req** | Provides a statement 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\> subelement within \<langusage\>. | 168 | |
| **\<language\>** | Rec; repeatable | Use as many \<language\> tags as necessary to encode languages predominantly represented in the text *of the finding aid.* | 166-167 | |
| encodinganalog="language" | Rec | Mapped Dublin Core element. | | |
| langcode="eng" | Rec | Consult ISO 639-2b for the correct language code(s). | | |
| scriptcode="Latn" | Rec | Consult ISO 15924 for the correct language code(s). | | |
| **\<descrules\>** | MA; not | Identifies the rules used in | 102 | |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | repeatable | preparing the finding aid. CCLA recommends the following tagging:<br><br><descrules>Describing Archives: A Content Standard</descrules><br><br>Not mandatory in legacy finding aids if the descriptive rules used are not known. | | |
| **<revisiondesc>** | MA; not repeatable | Used to record information about significant changes to the content of the finding aid *after* its initial EAD encoding. | | |
| **<change>** | MA; repeatable | Wrapper that holds information about notable changes to a finding aid; contains <date> and <item> elements. Use one <change> element for each change described. | 74 | |
| **<date>** | MA; not repeatable | Date(s) of change (e.g., August 2008). | 97-98 | |
| era="ce" | Rec | | | |
| calendar="gregorian" | Rec | | | |
| normal= | Rec | Enter normalized publication or copyright date in ISO 8601 format (e.g., 2007). | | |
| **<item>** | Rec; not repeatable | Brief narrative description of the change (e.g. Collection accrual inventory added). | 161-162 | |
| **<frontmatter>** | Opt.; not repeatable | <eadheader> rather than <frontmatter> is preferred as the source for titlepage information in the CCLA union database environment. <frontmatter> may be used in local or "in-house" applications, but elements contained within <frontmatter> will not be displayed by the CCLA database. | 146-147 | |

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

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | | | |
| **<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 CCLA 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 CCLA 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 CCLA encoding template for XMetaL defaults to "dc" encoding analogs for the <archdesc> elements. | | |
| **<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>. | 103-105 | |
| **<repository>** | **Req;** not repeatable | Wrapper for the institution or agency responsible for providing intellectual access to the materials being described. | 221-222 | |
| **<name>** \| **<corpname>** | **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$a". | | |
| source="lcnaf" | MA | If the name was found in the LC Name Authority File, enter "lcnaf" in the source attribute.  In this case, there is no need to use the RULES attribute. | | |
| rules="dacs \| aacr2" | MA | If the name was not found in the LC authority file but was formulated using DACS or AACR2 rules, enter either "dacs" or "aacr2" in the RULES attribute. | | |
| **<subarea>** | MA; repeatable | A secondary or subsidiary administrative level within the repository, such as the name of a department or division (e.g., BYU Film Archives or University Archives, BYU). | | 2.2.2 |
| encodinganalog="publisher" | Rec | MARC 21: "852$b". | | |
| **<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. | | 2.2.3 |
| **<addressline>** | MA; repeatable | If the location (city and state) of the repository is not obvious from the repository's name, provide it in <addressline>.<br><br>Use one <addressline> element for each line of postal or other address information.<br><br><addressline>1130 HBLL</addressline><br><addressline>Brigham Young University</addressline><br><addressline>Provo, UT 84602</addressline><br><addressline>http://sc.lib.byu.edu</addressline> | | |
| **<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="identifier" | Rec | MARC 21: "090". | | |
| countrycode="US" | **Req** | Use ISO 3166-1 code, usually "US" (United States) for CCLA participants. | | 2.1.5 |
| repositorycode= | **Req** | Use the same value entered in MAINAGENCYCODE in <eadid>. | | 2.1.4 |

| 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 Library | DACS |
|---|---|---|---|---|
| **\<origination\>** | MA; not repeatable | Information about the individual(s) or organization(s) responsible for the creation, accumulation, assembly, and/or maintenance and use of the described materials.<br><br>\<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 entire body of material described in the finding aid). | 189-190 | 2.6; Ch. 9 |
| **\<persname\> \| \<famname\> \| \<corpname\>** | MA; Repeatable | \<persname\>: Proper name of an individual (lastname, firstname—Smith, Joseph, 1805-1844),<br> or \<famname\>: Proper name of family (direct word order—Smoot family),<br> or \<corpname\>: Proper name of organization/agency (direct word order—Brigham Young University-Idaho),<br> or name of conference or meeting, exhibition, expedition, athletic contest, fair, etc. (see \<corpname\> in the Tag Library for more details).<br><br>Use LC name authority if possible or formulate according to DACS or AACR2 rules. | 195-197, 140-141, 85-86 | Ch. 9, 12, 14 |
| 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 \| aacr2" | MA | If the name was not found in the LC authority file but was formulated using DACS or AACR2 rules, enter either "dacs" or "aacr2" in the RULES attribute. | | |
| encodinganalog="creator" | Rec | Enter "100" for personal name; "100" for family name; "110" for corporate name; "111" for meeting name or conference name for the primary creator of the material (note that both "110" and "111" map to \<corpname\>). Additional creators should be given 7XX encoding analogs.<br><br>MARC 21: "100 \| 110 \| 111 \| 700 \| 710 \| 711" | | |
| authfilenumber= | Rec | Enter the authority file number of the creator of the materials. | | |
| role="creator \| collector \| photographer" | Rec | A contextual role or relationship with the person, family, or corporate body within element. Usually use "creator," "collector," or "photographer" at the top level of description. Additional role terms may be used as appropriate from the [MARC Relator Term list](#) at the Library of Congress. Do not use "subject." | | Ch. 9 |
| **\<unittitle\>** | **Req;** not repeatable | The title, either transcribed or supplied, of the described collection. A supplied title generally consists of the name of the creator(s) or collector(s) and the nature of the materials being described.<br><br>\<unitttitle encodinganalog="title"\>Elaine Cannon papers\</unittitle\><br><br>\<unitttitle encodinganalog="title"\>BYU Women scrapbook\</unittitle\><br><br>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\> element, and set the \<title\> element's RENDER attribute to "italic".<br><br>\<unitttitle encodinganalog="title"\>Matthew A. Rogers \<title render "italic"\>Provo Daily Herald\</title\> collection\</unittitle\> | 257-258 | 2.3 |
| encodinganalog="title" | Rec | MARC 21: "245$a". | | |
| **\<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 | 253-254 | 2.4 |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | date(s), specifying type of date in the TYPE attribute. CCLA 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.<br><br>To insure compliance with ISAD(G), do *not nest <unitdate> inside <unittitle>*. | | |
| type="inclusive \| bulk" | **Req** | 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. | | |
| 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" | Rec | | | |
| calendar="gregorian" | Rec | | | |
| normal= | **Req** | Enter normalized begin/end dates in ISO 8601 format (e.g., 1902/1987). | | |
| certainty= | Rec | Indicates the level of confidence for the information given; for example, set to "circa" if the dates are uncertain | | |
| encodinganalog="date" | Rec | "245$f" for inclusive dates; "245$g" for bulk dates. MARC 21: "245$f \| 245$g ". | | |
| **<physdesc>** | **Req;** repeatable | A wrapper element for physical details about the described materials. Use subelements <extent>, <physfacet>, <dimensions>, and if desired, <genreform> to record the information.<br><br>Use separate <physdesc> element sets to accommodate physical description information for different formats included in the collection (e.g., one <physdesc> for number of linear feet of papers, another <physdesc> for number of photographic prints). | 198 | 2.5 |
| **<extent>** | **Req;** repeatable | State extent of space occupied (in linear or cubic feet) and/or number of 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 <physdesc> to state the same information in different ways (e.g., one <extent> element for cubic feet and one for number of containers inside the same <physdesc> element). Units of measure should be expressed as part of the contents of this tag.<br><br><physdesc><extent>3 boxes</extent><extent>(1.5 linear ft.)</extent></physdesc><br><br><physdesc><extent>354 photographic prints</extent></physdesc> | 131-132 | 2.5 |
| encodinganalog="format" | Rec | MARC 21: "300$a". | | |
| **<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; Appendix B |
| **<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; Appendix B |
| **<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; Appendix B |
| **** | Opt; not repeatable | Use for a very brief (3-4 sentences) summary of collection contents at the highest level. (Use <scopecontent> for a fuller description). The text in the top-level element is displayed in search result lists presented in the CCLA finding aids database. The | 26-27 | 3.1 |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | abstract should provide the user with enough information to make a decision of whether or not to view the complete finding aid. | | |
| encodinganalog="description" | Rec | MARC 21: "5203_". | | |
| **<physloc>** | Rec; not repeatable | Name or number of building, room, stack, shelf, or other tangible area where the material is shelved. | 201-202 | 4.2.6 |
| encodinganalog= | Opt | The MARC 852 field contains various subfields that may be mapped to information in <physloc>. | | |
| **<langmaterial>** | **Req;** not repeatable | Wrapper element for recording the language(s) of the archival materials. | 164-165 | 4.5 |
| **<language>** | MA; repeatable | Subelement of <langmaterial> within which the language of the materials being described is specified.<br><br><langmaterial> <language langcode="eng"/> <language langcode="fre"/></langmaterial> | 166-167 | 4.5 |
| langcode= | MA; repeatable | Consult ISO 639-2b for the correct language code(s). | | 4.5 |
| encodinganalog="language" | Rec | MARC 21: "546". | | |
| **</did>** | | | | |
| **<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. | 93-94 | |
| xlink:type="extended" | MA | Required XLink attribute. | | |
| **<daodesc>** | Opt; repeatable | A wrapper element for caption information about the linked image. | 92 | |
| **<p>** | MA; repeatable | Enter the caption information about the linked image. This text will display directly under the image. | 193-194 | |
| **<resource>** | MA; repeatable | Provides a way to refer to the starting point in the link. When linking to an illustration image, do not include text in the <resource> element. | 223-224 | |
| xlink:type="resource" | MA | Required XLink attribute. | | |
| xlink:label= | MA | Provides a name for the starting point in the link. A typical value is "start." | 13 | |
| **<daoloc>** | MA; repeatable | The location of the digital image of the item in the collection selected to illustrate the finding aid. | 95-96 | |
| xlink:type="locator" | MA | Required XLink attribute. | | |
| xlink:label= | MA | Provides a name for the destination of the link. A typical value is "image." | 13 | |
| xlink:title="image of XXX" [where XXX is a brief description of the image] | Opt | This allows users who have difficulty seeing online images to see a text statement instead. | | |
| xlink:role= | Rec | Indicates the MIME type of the linked image file, such as "image/jpeg" or "image/tif". | 19 | |
| xlink:href= | MA | Enter the full URL of the image file that will serve as an illustration. | 18 | |
| **<arc>** | MA; repeatable | Provides information about the direction, display, and activation of the linked illustration image. | 39-40 | |
| xlink:type="arc" | MA | Required XLink attribute. | | |
| xlink:from= | MA | Enter the same text used in the <resource> element's LABEL attribute, such as "start". | 18 | |
| xlink:to= | MA | Enter the same text used in the <daoloc> element's LABEL attribute, such as "image". | 19 | |
| xlink:show="embed" | MA | Determines whether the digital image replaces the current window, opens the image in a new window, or embeds the image within the finding aid document. | 19 | |
| xlink:actuate="onLoad" | MA | Determines whether the image is displayed automatically when the finding aid file is opened (loaded) or must be opened by the user (by clicking on specific text). | 18 | |
| **<phystech>** | Opt; not repeatable | See the Tag Library for information on this element. | 203 | 4.2; 4.3 |
| **<originalsloc>** | Opt; not repeatable | See Tag Library for information on this element. | 187-188 | 6.1 |

| 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 Library | DACS |
|---|---|---|---|---|
| **\<bioghist\>** | MA; repeatable | Provides researcher with background and context information pertaining to record creator(s) or collector(s). If the biographical or historical information is provided in narrative form, the text must be enclosed in paragraph \<p\> tags.  \<p\> is repeatable. If more than one \<bioghist\> 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\> \<bioghist encodinganalog="5450_\>\<p\>text of first note\</p\>\</bioghist\> \<bioghist encodinganalog="5450_\>\<p\>text of second note\</p\>\</bioghist\> \</bioghist\> | 55-56 | 2.7; Ch. 10 |
| encodinganalog="description" | Rec | In order to distinguish a *biographical 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), 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_". | | |
| **\<head\>** | Rec; repeatable | In order to distinguish a *biographical 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 \<head\> element may be used inside \<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 \<bioghist\> element is used. | | |
| **\<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. Text should be enclosed in paragraph \<p\> tags; \<p\> is repeatable | 229-231 | 3.1 |
| encodinganalog="description" | Rec | MARC 21: "5202_". | | |
| **\<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 \<p\> tags.  A possible use of \<odd\>: If a legacy finding aid combines \<bioghist\> and \<scopecontent\> information, the text could be placed inside \<odd\>.  However, CCLA strongly recommends that consortium members use more specific note elements whenever possible. Do not confuse with \<note\> which 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 that is more than a short comment. While \<odd\> is repeatable, best practice is to nest a separate \<p\> element for each general note inside a single \<odd\> element.  The exception is when a specific \<odd\> note must be identified in the TYPE attribute. Finding aids for photographs or other collections sometimes include essay-like contextual or interpretive notes that belong in | 185-186 | 7.1.2 |

| 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 Library | DACS |
|---|---|---|---|---|
| | | neither <bioghist> or <scopecontent> because they 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. <odd> may be used to accommodate such notes. Enter "hist" into the <odd> TYPE attribute to specify that this is a contextual/interpretative note.<br><br>For other general notes, a nested <head> element containing a brief heading clarifying the contents of the note may be provided, but *only if the note is needed.* | | |
| encodinganalog="description" | Rec | MARC 21: "500". | | |
| <head> | Opt; repeatable | If needed to clarify the contents of the <odd> note, provide the heading here. Provide a heading only if the contents of the <odd> note would be unclear without it. One <head> may be used with each <odd>. | 154 | |
| **<arrangement>** | MA; not repeatable | Provides information about the arrangement of the collection (into series, for example) and/or the filing sequence of the material (alphabetical, chronological, etc.).<br><br><arrangement><p>Arranged in two series: 1. Correspondence (chronological); 2. Subject files (alphabetical by topic).</p></arrangement><br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | 46-47 | 3.2 |
| encodinganalog="description" | Rec | MARC 21: "351". | | |
| **<fileplan>** | Opt; not repeatable | See the Tag Library for information on this element. | 144-145 | 4.6 |
| **<altformavail>** | Rec; not repeatable | Provides researchers with 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>.<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | 35-36 | 6.2 |
| encodinganalog="relation" | Rec | MARC 21: "530". | | |
| **<accessrestrict>** | **Req;** not repeatable | Provides researchers with information about conditions governing access. If there are no restrictions on access, repositories are strongly encouraged to a make a statement to that effect, such as: "Open to public research."<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | 28-29 | 4.1; 4.2 |
| encodinganalog="rights" | Rec | MARC 21: "506". | | |
| **<legalstatus>** | Opt; not repeatable | See the Tag Library for information on this element. | 170 | 4.1 |
| **<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 <userestrict>.<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | 259-260 | 4.4 |
| encodinganalog="rights" | Rec | MARC 21: "540". | | |
| **<prefercite>** | Rec; not repeatable | Provides researcher with a preferred format for identifying or citing the described materials.<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable.<br><br>MARC 21 encodinganalog="524". | 204-205 | 7.1.5 |

| 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 Library | DACS |
|---|---|---|---|---|
| **<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 <p> tags; <p> is repeatable. MARC 21 encodinganalog="561". | 88-89 | 5.1 |
| **<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 non-confidential information deemed useful by the repository. Text should be enclosed in paragraph <p> tags; <p> is repeatable. MARC 21 encodinganalog="541". | 31-32 | 5.2 |
| **<accruals>** | Opt; not repeatable | Provides researchers with information about anticipated additions to materials being described. Text should be enclosed in paragraph <p> tags; <p> is repeatable. MARC 21 encodinganalog="584". | 30 | 5.4 |
| **<processinfo>** | Rec; not repeatable | Provides researchers with information about processing actions such as accessioning, organizing, describing, preserving, and storing the described materials for research use. <processinfo><p>Processed; February 2007; Cory Nimer.</p></processinfo> Text should be enclosed in paragraph <p> tags; <p> is repeatable. MARC 21 encodinganalog="583". | 206 | 8.1 |
| **<separatedmaterial>** | Rec; not repeatable | Provides researchers with information on materials that have been physically separated or removed. Text should be enclosed in paragraph <p> tags; <p> is repeatable. MARC 21 encodinganalog="5440_". | 232-233 | 6.3 |
| **** | Opt; not repeatable | Provides researchers with citations to works that are based on or considered highly relevant to the materials being described. Use the *Chicago Manual of Style* to formulate bibliographic entries. Inside a bibliographic entry may be tagged in a simple paragraph <p> element. MARC 21 encodinganalog="510 | 581". | 50-51 | 6.4 |
| **<otherfindaid>** | Rec; not repeatable | 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 <p> tags; <p> is repeatable. MARC 21 encodinganalog="555". | 191-192 | 4.6 |
| **<relatedmaterial>** | Rec; not repeatable | 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. | 219-220 | 6.3 |
| encodinganalog="relation" | Rec | MARC 21: "5441_". | | |
| **<appraisal>** | Rec; not repeatable | Provides researchers with information about the process used to determine the archival value and thus the disposition of records based upon their current administrative, legal, and fiscal use; their evidential, intrinsic, and informational value; their arrangement and condition; and their relationship to other records. CCLA strongly encourages consortium members to identify what portion of their collecting policy justifies the acquisition of materials and how the | 37-38 | 5.3 |

| 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 Library | DACS |
|---|---|---|---|---|
| | | materials meet the collecting policy guidelines. | | |
| **\<controlaccess\>** | **Req;** Repeatable if nested within a single \<controlaccess\> | A wrapper element that designates key access points, preferably taken from a controlled vocabulary or list, for the materials described in the finding aid. CCLA strongly encourages consortium members to use \<controlaccess\> elements in their finding aids: <br><br> • 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 *subjects* of the collection; <br> • To indicate major topics, occupations, functions, or described titles included or associated with a collection. <br><br> Assign as many controlled access points as needed to represent the names, topics, places, etc. that are determined to be significant in the collection using \<controlaccess\> fields within the wrapper \<controlaccess\> element. Controlled subheadings may be added as needed, with each segment separated by double hyphens or enclosed in its appropriate element. <br><br> 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. <br><br> In addition, assigning at least one narrow and one broad **CCLA browsing term** (encoded in \<controlaccess\>\<subject source="ccla"\>) is required. <br><br> Use one \<controlaccess\> element as a wrapper for all access points, with optional, *additional* \<controlaccess\> tags nested inside for each subdivided access point. Types of controlled access terms include \<persname\>, \<famname\>, \<corpname\>, \<geogname\>, \<subject\>(LCSH), \<subject\>(CCLA browsing terms), \<genreform\>, \<occupation\>, \<function\>, and \<title\>. For consistent display of headings, group \<controlaccess\> terms by type. <br><br> 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. <br><br> 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. <br><br> If the name heading or subject term is not found in a standard source, do the following: <br><br> • Leave the SOURCE attribute blank <br> • Construct a name heading following an established content standard such as DACS or AACR2 <br> • For a subject or form/genre heading, follow the guidelines for constructing new terms in a standard such as the Art & Architecture Thesaurus (AAT) <br> • Use the RULES attribute to indicate the content standard by which the name heading or term is | 83-84 | |

| 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 Library | DACS |
|---|---|---|---|---|
| | | constructed (e.g., "lcsh", "dacs", "aat", etc.)<br>• If the term is not constructed according to an established content standard, encode the RULES attribute value as "local"<br><br>For instructions on assigning CCLA browsing terms, see under <subject> CCLA browsing terms below. | | |
| encodinganalog="subject \| contributor \| type \| coverage" | Rec | Use subject if the access point represents a subject of the collection.  Use contributor if the access point is the name of a contributor.  Use coverage for geographically focused access points. Use type for headings describing the physical format or content of the materials (genre/form headings). If a name functions as both a contributor and a subject of a collection, prepare two <controlaccess><persname> entries for that individual: one with encodinganalog="subject" to denote the person as a subject, the other with encodinganalog="contributor" 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>.<br><br>MARC 21: "600 \| 610 \| 611 \| 630 \| 650 \| 655 \| 656 \| 657 \| 700 \| 710 \| 711 \| 730 \| 740". | | |
| **<persname>** | MA; repeatable | Access terms related to personal names representing significant subject(s) and/or contributor(s) of the collection.  Provide one or more <persname> elements.<br><br>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.<br><br>Controlled subheadings may be added as needed, with each segment separated by double hyphens.  Do not end the heading with a period.<br>Optionally, controlled subheadings may be added as needed, with each segment enclosed in the appropriate element (use of double hyphens to separate subheadings is not allowed) within a separate <controlaccess> tag.  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.<br><br><controlaccess><persname source="lcnaf" encodinganalog="subject">Cluff, Benjamin, 1858-1948--Archives</persname></controlaccess><br><br>or<br><br><controlaccess encodinganalog="subject"><persname source="lcnaf">Cluff, Benjamin, 1858-1948</persname><genreform source="lcsh">Archives</genreform></controlaccess> | 195-196 | 2.6; Ch. 9, 12 |
| source= | MA | Use "lcnaf" if the name is established 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 content standard such as DACS or AACR2, use "local" instead.<br><br>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. | | |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| role= | Opt | If the ENCODINGANALOG for the <controlaccess> element is set to "contributor", ROLE may be used to identify the nature of the person's contribution. Terms may be selected from the MARC Relator Term list at the Library of Congress. Do not enter a role value if the <controlaccess> ENCODINGANALOG is "subject". | | |
| **<famname>** | MA; repeatable | Access terms related to family names.  Use one or more <famname> elements to represent significant subject(s) and/or contributor(s) of the collection.<br><br>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.<br><br>Controlled subheadings may be added as needed, with each segment separated by double hyphens or, optionally, enclosed in the appropriate element to separate subheadings. Do not end the heading with a period.<br><br><controlaccess><famname rules="dacs" encodinganalog="subject">Hinckley family--Archives</famname></controlaccess><br><br>or<br><br><controlaccess encodinganalog="subject"><famname rules="dacs" > Hinckley family </famname><genreform source="lcsh">Archives</genreform></controlaccess> | 140-141 | 2.6; Ch. 9; 12.29 |
| 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 DACS. | | |
| role= | Opt | If the ENCODINGANALOG for the <controlaccess> element is set to "contributor", ROLE may be used to identify the nature of the person's contribution. Terms may be selected from the MARC Relator Term list at the Library of Congress. Do not enter a role value if the <controlaccess> ENCODINGANALOG is "subject". | | |
| **<corpname>** | MA; repeatable | Used for access terms related to corporate and conference names representing significant subject(s) and/or contributor(s) of the collection.<br><br>Controlled subheadings may be added as needed, with each segment separated by double hyphens. Optionally, controlled subheadings may be enclosed in the appropriate element. With the exception of a period needed for an initial in a corporate name heading, do not end a corporate name with a period.<br><br><controlaccess><corpname source="lcnaf" encodinganalog="subject">Brigham Young University</corpname></controlaccess> | 85-86 | 2.6, Ch. 9, Ch. 14 |
| source= | MA | Use "lcnaf" if the name is 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 an authority file and use the RULES attribute to indicate how the name is established. | | |
| rules= | MA | Use "dacs" or "aacr2" to indicate how the name was formulated. | | |
| role= | Opt | If the ENCODINGANALOG for the <controlaccess> element is set to "contributor", ROLE may be used to identify the nature of the person's contribution. Terms may be selected from the MARC Relator Term list at the Library of Congress. Do not enter a role value if the <controlaccess> ENCODINGANALOG is "subject". | | |
| **<geogname>** | MA; repeatable | Access terms related to places, natural features, or political jurisdictions.  Use one or more <geogname> tags. | 152-153 | Ch. 13 |

| 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 Library | DACS |
|---|---|---|---|---|
| | | Controlled subheadings may be added as needed, with each segment separated by double hyphens. Optionally, controlled subheadings may be enclosed in the appropriate element.  <controlaccess><geogname source="lcnaf" encodinganalog="coverage">United States--Foreign relations--19th century</geogname></controlaccess>  or  <controlaccess encodinganalog="coverage"><geogname source="lcnaf">United States</geogname><subject source="lcsh">Foreign relations</subject><subject source="lcsh">19th century</subject></controlaccess> | | |
| source= | MA | Use "lcnaf" if the name is established in the LC Name Authority File.  Use "lcsh" if the name is established 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 available for a particular place, feature, or jurisdiction name, use "scm" to indicate that the name has been formulated according to the LC Subject Cataloging Manual. | | |
| **<subject>** | MA; repeatable | Access terms related to topics.  Use one or more <subject> tags.  Controlled subheadings may be added as needed, with each segment separated by double hyphens. Optionally, controlled subheadings may be enclosed in the appropriate element.  <controlaccess><subject source="lcsh" encodinganalog="subject">Japanese Americans—Evacuation and relocation, 1942-1945</subject></controlaccess>  or  <controlaccess encodinganalog="subject"><subject source="lcsh">Japanese Americans</subject><subject source="lcsh">Evacuation and relocation, 1942-1945</subject></controlaccess> | 237-238 | |
| source= | MA | CCLA recommends that repositories use LCSH as the source of subject headings used in finding aids; set SOURCE to "lcsh".  Institutions that participate 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". | | |
| rules= | | Leave blank. | | |
| **<subject> CCLA browsing terms** | **Req**; repeatable | To facilitate browsing of collections included in the CCLA union database, encoders should add topical "browsing" terms as appropriate to the materials described.  Only use terms included on the list of CCLA 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 CCLA browsing term, along with its broader 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 "cclabroad" in the SOURCE attribute, and for a narrow term, enter "cclanarrow" in the | | |

| 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 Library | DACS |
|---|---|---|---|---|
| | | SOURCE attribute. The assigned CCLA browsing terms included with other access points in a <controlaccess> wrapper. Optionally, each term may be nested inside separate <controlaccess> wrapper elements. Note that all CCLA browsing terms are placed in <subject>, even geographic and occupation terms.  Do not use subheadings.  Do not end with a period. <controlaccess><subject altrender="nodisplay" source="cclabroad" encodinganalog="subject">Agriculture</subject><subject altrender="nodisplay" source="cclanarrow" encodinganalog="subject">Ranching</subject></controlaccess> or <controlaccess encodinganalog="subject"><subject altrender="nodisplay" source="cclabroad" >Church of Jesus Christ of Latter-day Saints</subject></controlaccess><controlaccess encodinganalog="subject"><subject altrender="nodisplay" source="cclanarrow" >Missions and Missionaries</subject></controlaccess> | | |
| altrender="nodisplay" | **Req** | The browsing terms are not displayed in the finding aid; rather, they appear on the CCLA website as browsing headings under which are grouped all of the collections that include materials significant to that topic. | | |
| source="cclabroad \| cclanarrow" | **Req** | For each broad term assigned, enter "cclabroad" and for each narrow term assigned, enter "cclanarrow." | | |
| rules= | | Leave blank. | | |
| **<genreform>** | Rec; repeatable | Access terms related to genre or form 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, with each segment separated by double hyphens. Optionally, controlled subheadings may be enclosed in the appropriate element. <controlaccess><genreform source="aat" encodinganalog="type">Reports</genreform></controlaccess> | 150-151 | |
| source= | Rec | Encode appropriate code for source found in the Library of Congress' *Term, Name, and Title Sources* Code List. | | |
| rules= | | Leave blank. | | |
| **<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, with each segment separated by double hyphens. Optionally, controlled subheadings may be enclosed in the appropriate element. <controlaccess><occupation source="lcsh" encodinganalog="subject">College teachers--Utah</occupation></controlaccess> | 183-184 | |
| source= | Rec | Encode appropriate code for source found in the Library of Congress' *Term, Name, and Title Sources* Code List. | | |
| rules | | Leave blank. | | |
| **<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, with each segment separated by double hyphens. Optionally, controlled subheadings may be enclosed in the appropriate element. | 148-149 | |

| Elements and Attributes<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| | | \<controlaccess>\<function source="aat" encodinganalog="subject">Planning--Cities and towns\</function>\</controlaccess> | | |
| source= | Rec | Encode appropriate code for source found in the Library of Congress' *Term, Name, and Title Sources* Code List. | | |
| rules= | | Leave blank. | | |
| **\<title>** | MA; repeatable | 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.<br><br>\<controlaccess>\<title source="lctah" encodinganalog="subject">Provo daily herald\</title>\</controlaccess> | 246-247 | |
| 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 an authorized source as described above, but is formulated according to AACR2. | | |

Although not required for CCLA 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<br>*Elements are surrounded by angle brackets and rendered in boldface* | Status | Comments/Application Notes<br><br>**Req**=Required<br>MA=Mandatory if applicable<br>Rec=Recommended best practice<br>Opt=Optional | Tag Library | DACS |
|---|---|---|---|---|
| **<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. | 109-113 | |
| type="combined \| analyticover \| in-depth" | **Req** | While CCLA 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.<br><br>For finding aids that include a narrative description of major subdivisions, such as series and subseries, but that lack an item-level container list, use "analyticover."<br><br>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>** | **Req;** repeatable | Encoders must use number (<c01> through <c12>) component elements.<br><br>Nested <c0x>s should be used as needed to reflect the intellectual structure of the archival materials.<br><br>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 needed in each component described in <dsc>). | 61-62 | |
| level="recordgrp \| collection \| subgrp \| series \| subseries \| file \| item \| otherlevel"<br><br>or<br><br>otherlevel="accession \| sub-subseries \| sub-file" | **Req** | CCLA 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.<br><br>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" | | Ch. 1 |

| | | | | |
|---|---|---|---|---|
| | | to either term ("sub-subseries" or "sub-file"). If the prefix is used, however, the attributes must be encoded as follows:<br><br><c04 level="otherlevel" otherlevel="sub-subseries"> | | |
| **<did>** | **Req;** not repeatable | A required wrapper element that bundles other elements identifying core information about the described materials. | 103-105 | |
| **<unitid>** | MA; not repeatable | Unique identities should be encoded as <unitid> rather than <container> or <unittitle>. (e.g., <unitid>Series X</unitid>). | 255-256 | 2.1.3 |
| encodinganalog="identifier" | Rec | MARC 21: "099". | | |
| **<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.<br><br>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. | 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", "reel", "frame", "oversize", reel-frame", "volume", "album", "page", "map-case", "folio", or "verticalfile".<br><br>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.  For example, a repository may elect to record "box" and "folder" information in two separate <container> elements, each one containing a different container type:<br><br><container type="box">8</container><br><container type="folder">8-10</container><br><br>Or both types may be combined in a single <container> element using a combination term such as "box-folder":<br><br><container type="box-folder">8/8-10</container><br><br>However, do not use two <container> elements for information of the same | | |

| | | TYPE, even to record complex information. Rather, enter the complex information into a single <container> element. In the following example, the material described is contained in box 4, folder 10 through box 6, folder 3.<br><br>Acceptable:<br><br><container type="box-folder">4/10-6/3</container><br>Or<br><container type="box-folder">4/10-15, 6/1-3</container><br>Or<br><container type="box-folder">4/10-15 to 6/1-3</container><br><br>But not:<br><container type="box-folder">4/10-15</container><br><container type="box-folder">6/1-3</container> | | |
|---|---|---|---|---|
| **<origination>** | MA; not repeatable | Mandatory if creator at level being described is different than defined at the <archdesc> or in a parent level. | 189-190 | 2.6; Ch. 9 |
| **<persname> \| <famname> \| <corpname> \| <name>** | MA; repeatable | <persname>: Proper name of an individual (lastname, firstname—Smith, Joseph, 1805-1844),<br> or <famname>: Proper name of family (direct word order—Smoot family),<br>or <corpname>: Proper name of organization/agency (direct word order—Brigham Young University-Idaho),<br>or name of conference or meeting, exhibition, expedition, athletic contest, fair, etc. (see <corpname> in the Tag Library for more details).<br><br>Use LC name authority if possible or formulate according to DACS or AACR2 rules. | | |
| encodinganalog="creator" | Rec | 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.<br><br>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>** | Rec; not repeatable | It is strongly recommended that titles be used at the component level.<br><br>*Do not nest <unitdate> inside <unittitle>.* | 257-258 | 2.3 |
| encodinganalog="title" | Rec | MARC 21: "245$a". | | |
| **<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 | 253-254 | 2.4 |

| | | | | |
|---|---|---|---|---|
| | | own <unitdate>. If no date is available or applicable for a particular component, use the term "undated" inside the <unitdate> tags.<br><br>*Do not nest <unitdate> inside <unittitle>.* | | |
| type="inclusive \| bulk" | Opt | | | |
| era="ce" | Opt | | | |
| calendar="gregorian" | Opt | | | |
| normal= | Opt | Enter the date or date range in ISO 8601 format. | | |
| encodinganalog="date" | Opt | MARC 21: "245$f". | | |
| **<physdesc>** | Rec; repeatable | A wrapper element for physical details about the described materials. Use subelements <extent>, and if desired, <physfacet>, <dimensions>, and <genreform> to record the information. | 198 | 2.5 |
| **<extent>** | Rec; repeatable | At the series or subgroup component level, extent should be encoded here rather than in <unittitle> or another element. Units of measure should be expressed as part of the content of this element. | 131-132 | 2.5 |
| encodinganalog="format" | Opt | MARC 21: "300$a". | | |
| **<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. | 164-165 | 4.5 |
| **<language>** | Rec; repeatable | Subelement of <langmaterial> within which the language of the materials being described is specified.<br><br><langmaterial> <language langcode="eng"/> <language langcode="fre"/> | 166-167 | 4.5 |
| langcode= | Opt | Consult ISO 639-2b for the correct language code(s) | | 4.5 |
| encodinganalog="language" | Opt | MARC 21: "546". | | |
| **</did>** | | | | |
| **<bioghist>** | Rec; not repeatable | At highest component levels, such as subgroup or series levels, biographical or administrative history information should be included if available *and* if the information is different from the collection-level <bioghist> note.<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | | 2.7, Ch. 10 |
| encodinganalog="description" | Opt | MARC 21: "5450_ \| 5451_". | | |
| **<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 item) may include scope and content notes as needed. Use <scopecontent> instead of or <note> tags. | 229-231 | 3.1 |
| encodinganalog="description" | Opt | MARC 21: "520". | | |
| **<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."<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | 28-29 | 4.1 |
| encodinganalog="rights" | Opt | MARC 21: "506". | | |
| **<userestrict>** | Rec; not repeatable | Provides information about copyright status or other conditions that affect the use of a | 259-260 | 4.4 |

| | | | | |
|---|---|---|---|---|
| | | 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.<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | | |
| encodinganalog="rights" | Opt | MARC 21: "540". | | |
| **<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.<br><br>Text should be enclosed in paragraph <p> tags; <p> is repeatable. | 179-180 | |
| **NOTE** | | **All other elements that may be used in the top-level <archdesc>, including <arrangement>, <altformavail>, <odd>, etc. may be used as needed in <dsc>.** | | |

# Table 4: CCLA Core Finding Aid

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

This CCLA 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 CCLA Best Practice Guidelines.

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