Finding Aids: EAD Tagging Guidelines

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INTRODUCTION

EAD finding aids can be created using a variety of methods. Processors can either type the entire finding aid by hand or use any number of tools to create an EAD inventory. Tools used by the Minnesota Historical Society include:

- MARC2EAD.xsl

  This stylesheet converts a MARCXML catalog record into an EAD file. This method is very efficient for encoding the overview, administrative information, and catalog headings of an inventory. Once a MARC record has been converted into EAD, a detailed description can easily be appended to the xml file that results from this process.

- EAD2002_template.xml

  This is an xml template that can be filled in as needed using either an xml or a text editor. Comments and notes are included to alert processors to fields that need attention, e.g. <?replace_text {person/organization'sName}?>.

  When using the EAD template, processors must edit several pieces of boilerplate, remove notes to processors, and delete empty elements that were not used.

  Boilerplate that processors must revise includes the following tags in the template:

  <archdesc>
    Edit the *level* attribute for the appropriate level of archival description:
      <archdesc level="*collection/subgrp/series*" type="inventory" relatedencoding="MARC">

  <origination>
    Edit *encodinganalog* for the appropriate MARC field:
      <origination label="Creator:" encodinganalog="*100/110/111*">

  <corpname>
    Edit *encodinganalog* for the appropriate MARC field:
      <corpname encodinganalog="*110/111*" role="creator"> <?replace_text {MARC 1xx text}?>.</corpname>

  <unitdate>
    Edit *normal* for the appropriate inclusive year span:
      <unitdate label="Date:" encodinganalog="245$f" normal="*yyyy/yyyy*" type="inclusive">

  <language>
    Revise language and *langcode* as appropriate.
      <language langcode="*eng*">English.</language>

  <physloc>
    Add collection call numbers as appropriate.

<physloc label="Location:">See <ref "target="a9">Detailed Description</ref> for shelf locations.</physloc>

<bioghist>
Revise <head> boilerplate and *altrender* as appropriate.
<head altrender="***biography***" id="a2">***BIOGRAPHICAL/HISTORICAL*** NOTE</head>

- Excel tables

  Box lists, chronologies, and other tables that contain highly structured data can be entered quite easily into an Excel table. EAD tags can be added to surrounding columns and the data may then be exported into xml.

  Tagging templates that facilitate Excel methods are available on the department's network in the *FindingAids/Excel 2 EAD* folder. Separate instructions included within this folder explain how to use Excel templates to create the detailed description section of an EAD inventory (*EAD_2002 Excel Instructions.doc*).

- Scan to PDF

  Typewritten lists can be scanned to PDF and exported into Word with Adobe Acrobat or copy and pasted into Word. Once exported into Word, search and replace techniques can be used to separate the lists into discrete parts. These parts can be converted into a table that can be opened in Excel and then tagged in EAD.

CORRECTIONS AND REVISIONS

MHS migrated to EAD version 2002 in August 2008. Inventories created prior to August 2008 may not meet the standards detailed in these guidelines.

In particular, under EAD version 1 guidelines, boilerplate labels for each section head were tailored to each specific inventory, e.g. *Biography of Walter F. Mondale*. Beginning in August 2008, section heads were standardized and are no longer tailored, e.g. *Biographical Note*. When revising a legacy finding aid, sections heads should be changed to meet the current standard.

Processors may also find other coding inconsistencies in earlier EAD inventories. Language of material will be missing from the Overview and should be added. The *normal* attribute will also be missing from the date in the Overview date and should be added. Component level dates in detailed descriptions may not be encoded as <unitdate> but encoded as parts of titles. Other finding aid notes that are self-referential, meaning

that they refer to the availability of a printed version of the inventory, may have been included and should be eliminated.

When making corrections or revisions, the time required to edit a legacy finding aid must be balanced against user needs and processing priorities.

EAD STRUCTURE

For web display, an xslt stylesheet is used to transform the xml files into html. The stylesheet tells the browser how to display each EAD element. Processors should take note that not every valid EAD element is built into the stylesheet.

The EAD structures shown below represent both the minimal and full sets of EAD tags that MHS uses. Additional tags and attributes should be encoded as explained in the remainder of these guidelines.

All inventories must meet the minimal standard. Many elements included within the full set are optional or required when applicable to the collection in hand.

For more specific information about EAD elements and their related attributes, see the EAD Tag Library: http://www.loc.gov/ead/tglib/index.html.

Minimal Standard
 	
 All elements are mandatory.
	`<ead>`
	    `<eadheader>`
	      `<eadid> </eadid>`
	      `<filedesc>`
	        `<titlestmt>`
	          `<titleproper></titleproper>`
	          `<subtitle></subtitle>`
	          `<author></author>`
	        `</titlestmt>`
	        `<publicationstmt>`
	          `<publisher></publlisher>`
	          `<address> <addressline></addressline> </address>`
	        `</publicationstmt>`
	        `<seriesstmt>`
	          `<p></p>`
	        `</seriesstmt>`
	      `</filedesc>`
	      `<profiledesc>`
	        `<creation> <date></date> </creation>`
	        `<langusage> <language></language> </langusage>`
	      `</profiledesc>`
	    `</eadheader>`
	    `<archdesc>`
	      `<did>`
	        `<unitid></unitid>`
	        `<repository></repository>`

```
                          <origination> <corpnane> </corpname> </origination>
                          <unittitle> </unittitle>
                          <unitdate> </unitdate>
                          <langmaterial> <language></language> </langmaterial>
                          <abstract> </abstract>
                          <physdesc> </physdesc>
                          <physloc> </physloc>
                      </did>
                      <descgrp type="admininfo">
                          <prefercite></prefercite>
                          <acqinfo></acqinfo>
                       </descgrp>
                      <dsc>
                          <c01>
                              <did>
                                  <physloc></physloc>
                                  <container></container>
                                  <unittitle> <//unittitle>
                                  <unitdate> </unitdate>
                                  <physdesc> </physdesc>
                              </did>
                          </c01>
                      </dsc>
                  </archdesc>
              </ead>
```

| **Full Standard**

Includes all mandatory elements listed in the minimal structure as well as additional optional elements or elements that are required when applicable. | ```<ead>
    <eadheader>
        <eadid> </eadid>
        <filedesc>
            <titlestmt>
                <titleproper></titleproper>
                <subtitle></subtitle>
                <author></author>
                <sponsor></sponsor>
            </titlestmt>
            <publicationstmt>
                <publisher></publlisher>
                <address> <addressline></addressline> </address>
            </publicationstmt>
            <seriesstmt>
                <p></p>
            </seriesstmt>
        </filedesc>
        <profiledesc>
            <creation> <date></date> </creation>
            <langusage> <language></language> </langusage>
        </profiledesc>
        <revisiondesc>
            <change> <date></date> <item></item> </change>
        </revisiondesc>
    </eadheader>
    <archdesc>``` |
| --- | --- |

```
<did>
      <unitid></unitid>
      <repository></repository>
      <origination> <corpnane> </corpname> </origination>
      <unittitle> </unittitle>
      <unitdate> </unitdate>
      <langmaterial> <language></language> </langmaterial>
      <abstract> </abstract>
      <physdesc> </physdesc>
      <physloc> </physloc>
</did>
<bioghist></bioghist>
<scopecontent></scopecontent>
<arrangement>
      <list> <head></head> <item></item> <item></item> <list>
</arrangement>
<otherfindaid></otherfindaid>
<descgrp type="admininfo">
      <accessrestrict></accessrestrict>
      <userestrict></userestrict>
      <prefercite></prefercite>
      <acqinfo></acqinfo>
      <processinfo></processinfo>
 </descgrp>
<relatedmaterial></relatedmaterial>
<separatedmaterial></separatedmaterial>
<controlaccess>
      <controlaccess></controlaccess>
</controlaccess>
<dsc>
      <c01>
            <did>
                  <physloc></physloc>
                  <container></container>
                  <unittitle> <imprint></imprint> <//unittitle>
                  <unitdate> </unitdate>
                  <physdesc> </physdesc>
            </did>
            <accessrestrict></accessrestrict>
            <userestrict></userestrict>
            <scopecontent></scopecontent>
            <daogrp>
                  <daodesc></daodesc>
                  <daoloc></daoloc>
                  <daoloc></daoloc>
            </daogrp>
      </c01>
</dsc>
</archdesc>
</ead>
```

XML, DOCUMENT TYPE, AND STYLESHEET DECLARATIONS

Each EAD finding aid must begin with three declarations that instruct a computer how to interpret and process the file. These declarations include an XML language statement, a reference to the EAD document type definition, and a reference to the xslt stylesheet that transforms the finding aid into html in a web browser.

XML declaration	<?xml version="1.0" encoding="utf-8" standalone="no"?>
DTD declaration	<!DOCTYPE ead PUBLIC "+//ISBN 1-931666-00-8//DTD ead.dtd (Encoded Archival Description (EAD) Version 2002)//EN" "ead.dtd">
XSLT declaration	<?xml-stylesheet type="text/xsl" href="webead.xsl"?>

All three declarations are already built into EAD2002 template.

When using the MARC2EAD conversion process, the xslt stylesheet declaration is included in a note to the processor that must be edited.

EAD HEADER

**<eadheader audience="internal" countryencoding="iso3166-1"
dateencoding="iso8601" langencoding="iso639-2" repositoryencoding="iso15511">**

The <eadheader> contains several elements that are not displayed on the web screen or in a printout but that are essential to each xml file. These elements provide information about the inventory's title, filename, content, creation, revision, and publication.

All the tags and attributes shown in the table below are mandatory except <sponsor> and <revisiondesc>.

	EAD Examples	Required
Ead header	<eadheader audience="internal" countryencoding="iso3166-1" dateencoding="iso8601" langencoding="iso639-2" repositoryencoding="iso15511">	Mandatory
File Name	<eadid countrycode="us" mainagencycode="MnHi"> 00392.xml<eadid>	Mandatory

File Description	<filedesc>
	    <titlestmt>
	        <titleproper><?replace_text
	            {person/organization'sName}?>: </titleproper>
	        <subtitle>An Inventory of <?replace_text
	            {His/Her/Their/Its}?><?replace_text
	            {Papers/Records}?> at the Minnesota Historical
	            Society</subtitle>
	        <author>Finding aid prepared by
	            <?replace_text {catalogerName} ?>.</author>
		Mandatory
		
		<sponsor> required when applicable

	`<sponsor><?replace_text {Sponsor} ?>.</ sponsor >`
	`</titlestmt>`
	`<publicationstmt>`
	   `<publisher encodinganalog="Publisher">`Minnesota
	     Historical Society`</publisher>`
	   `<address><addressline>`St. Paul,
	MN.`</addressline></address>`
	`</publicationstmt>`
	`<seriesstmt>`
	   `<p>` *[Holding Area]* Collection`</p>`
	`</seriesstmt>`
	`</filedesc>`	

Finding Aid Description	`<profiledesc>`
	   `<creation>`Finding aid encoded by `<?replace_text`
	     `{encoderName}?>`,
	     `<date><?replace_text {encodingDate}?>.</date>`
	   `</creation>`
	   `<langusage>`Finding aid written in
	     `<language langcode="eng">`English`</language>`
	   `</langusage>`
	`</profiledesc>`
		Mandatory

Finding Aid Revision	`<revisiondesc>`
	   `<change>`
	     `<date><?replace_text {RevisionDate}?></date>`
	     `<item><?replace_text {Reason for Change}?></item>`
	   `</change>`
	`</revisiondesc>`
		Required when applicable

<titleproper> and <subtitle>

Information provided in the <titleproper>and <subtitle> elements determine the title of the inventory.

The <titleproper> always contains either the name of the creator or, if there is no creator as is common with Sound and Visual holdings, the title of the collection. When an inventory is transformed into a web browser view, information entered as <titleproper> appears in the browser's tab header as the title of the web page.

Information given as the <subtitle> is always stated in the following form: *An Inventory of X at the Minnesota Historical Society,* with *X* referring to a collection title, shortened modification of the collection's title, or a reference to the collection's primary type of material. For government records, the subtitle should always be the same as the 245 in the MARC record.

The <titleproper> and <subtitle> elements should follow Chicago Manual of Style title capitalization.

Essentially, <titleproper> maps to MARC field 1XX, the same as the ead/archdesc/did/origination element, and <subtitle> maps to MARC field 245 or ead/archdesc/did/unittitle. The exception here is that while the<titleproper> element is similar to MARC field 1XX, certain liberties can be taken to modify names.

For example, in inventories created for State Archives holdings, the name of a government agency given as the <titleproper> of an inventory may be modified from its authorized form so that the inventories can be filed in proper alphabetical order in our indexes and reading room notebooks. In the case of personal names, the name is always modified from its authorized form in indirect order (Durenberger, Dave) to direct order (Dave Durenberger). Date and place qualifiers need not be included in modified personal and corporate names unless there is a conflict with a similar name that requires clarification.

Examples follow:

Benjamin Edwards McHie:
An Inventory of His RAP Weekly Radio Talk Show Audio Collection at the Minnesota Historical Society

Metropolitan Council: Metropolitan Parks and Open Space Commission:
An Inventory of Its Subject Files at the Minnesota Historical Society

Governor: Dayton, Mark:
An Inventory of His Administrative Rules Files at the Minnesota Historical Society

Minnesota 2000 Documentary Photography Project:
An Inventory of the Collection at the Minnesota Historical Society

Harold E. Stassen:
An Inventory of His Papers at the Minnesota Historical Society

<seriesstmt><p>

A paragraph included within the series statement is used to indicate the larger holding area for each inventoried collection. The EAD template and files transformed by the MARC2EAD stylesheet include a note to the processor to select one of the five holding area statements and delete the others. The five holding areas include:

Books and Periodicals
Government Records
Manuscripts Collection

Music, Notated
Newspapers
Oral History Collection
Sound and Visual Collection

<sponsor>

When a finding aid has been created under a grant, a <sponsor> element should be included within the <titlestmt> immediately following the <author> statement.

<revisiondesc>

This element is included when a revision to a finding aid has been made to indicate who made the revision, when, and why. MHS uses this element to track additions or changes that have been made to a collection. Minor revisions and corrections are not indicated.

Changes are listed in descending chronological order with the most recent revision listed first.

> ***Example***:   *<revisiondesc>*
>   *<change>*
>   *<date>*July 2014*</date>*
>   *<item>*Accession 16880 added, David B. Peterson*<item>*
>   *</change>*
>   *<change>*
>   *<date>*January 2012*</date>*
>   *<item>*Digital versions added*</item>*
>   *</change>*
>   *</revisiondesc>*

<eadid>

Enter the unique filename assigned to each specific EAD inventory.

Web Display	
	BENJAMIN EDWARDS MCHIE: **An Inventory of His RAP Weekly Radio Talk Show Audio Collection at the Minnesota Historical Society** **Sound and Visual Collection**

Web Display	GOVERNOR: DAYTON, MARK: An Inventory of His Administrative Rules Files at the Minnesota Historical Society Government Records
Web Display	HAROLD E. STASSEN: An Inventory of His Papers at the Minnesota Historical Society Manuscripts Collection

INVENTORY SECTIONS

Table of Contents
▼ Expand All
► Collapse All
Overview
Biographical Note
Scope and Contents
Arrangement
Other Finding Aids
Administrative Info
Detailed Description
Related Material
Separated Material
Catalog Headings

Inventories can contain up to nine sections to describe different aspects of a collection. These sections include an overview, biographical or historical note, scope and contents note, arrangement, other finding aids, administrative information, detailed description, related or separated materials, and catalog headings. Of these, only the overview, administrative information, and detailed description are mandatory.

The webead.xsl stylesheet produces a sidebar to help users navigate an inventory. Buttons in the table of contents allow a user to link to individual sections within the inventory. These buttons are produced by the stylesheet and require accurate coding of the *id* attribute in the *<head>* element of each EAD section. The attributes are included in the EAD template and MARC2EAD conversion process.

Expand/Collapse

▼ Expand All
▶ Collapse All
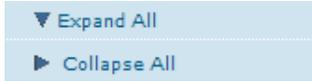
Buttons on the navigation sidebar allow users to expand or collapse an entire finding aid.

Individual sections can also be expanded or collapsed.

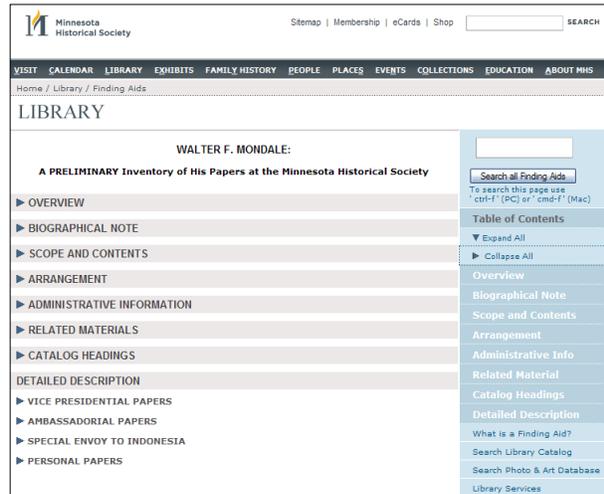Subsections nested within the main <bioghist> or <scopecontent> sections and complex series and subseries listed within the <dsc> will also expand or collapse.

Inventory Sections

For each major section within an inventory, encoding analogs are included that map the section to its MARC counterpart. Header labels for each section are typed in all upper case.

The table below shows how section encoding analogs and head id attributes for each section must be coded.

Sidebar Button	EAD Attributes	EAD Examples	Required
Overview	<did><head id="a1">	<head id="a1">OVERVIEW</head>	Mandatory
Biographical Note	encodinganalog="545" id="a2" altrender="biography"	<bioghist encoding analog="545"> <head id ="a2" altrender="biography"> BIOGRAPHICAL NOTE</head> Auguste Louis Larpenteur, pioneer St. Paul, Minnesota settler, was born… </bioghist>	Required when applicable*
Historical Note	encodinganalog="545" id="a2" altrender="history"	<bioghist encoding analog="545" <head id ="a2" altrender ="history"> HISTORICAL NOTE</head> Established by an Act of Congress in 1906… </bioghist>	Required when applicable*
Scope and Contents	encodinganalog="520"	<scopecontent encodinganalog="520">	Required

	id="a3"	`<head id="a3">`SCOPE AND CONTENTS`</head>`
		`<p>`Legislative bills, committee files, campaign files… `</p>`
		`</scopecontent>`
			when applicable

Arrangement	encodinganalog="351" id="a4"	`<arrangement encodinganalog="351">` `<head id="a4">`ARRANGEMENT`</head>`	Required when applicable
Other Finding Aids	encodinganalog="555" id="a6"	`<otherfindaid encodinganalog="555">` `<head id="a6">`OTHER FINDING AIDS`</head>`	Required when applicable
Administrative Info	id="a8"	`<descgrp type="admininfo">` `<head id="a8">`ADMINISTRATIVE INFORMATION`</head>`	Mandatory
Detailed Description	id="a9"	`<dsc type="combined">` `<head id="a9">`DETAILED DESCRIPTION`</head>`	Mandatory
Related Material	encodinganalog="544" id="a5"	`<relatedmaterial encodinganalog="544">` `<head id="a5">`RELATED MATERIALS`</head>`	Required when applicable
Separated Material	encodinganalog="544" id="a5a"	`<separatedmaterial encodinganalog="544">` `<head id="a5a">`SEPARATED MATERIALS`</head>`	Required when applicable
Catalog Headings	id="a7"	`<controlaccess>` `<head id="a7">`CATALOG HEADINGS`</head>`	Required when applicable

* Note that the button for both the biographical note and the historical note are coded *<head id="a2">*. Because the attribute is coded the same regardless of how the altrender attribute is coded, only one main <bioghist> section can be included. Code the *altrender* attribute as either "*biography*" or "*history*" to generate the appropriate button label. When needed, <bioghist> subsections may be included within a main <bioghist> section to delineate multiple notes.

OVERVIEW

<did>
    <head id="a1">

The Overview provides a high-level description of a collection. Creator, title, date, language, quantity, shelving location, and an abstract describe the entirety of the collection.

Several elements within the Overview map exactly to MARC fields and information that is provided in these elements should exactly match corresponding MARC data. Attributes that specify MARC encoding analogs are included within these elements.

Web Display	
	▼ OVERVIEW **Creator:** Silent Witness National Initiative (Organization). **Title:** Silent Witness National Initiative records. **Dates:** 1990-2000. **Language:** Materials in English. **Abstract:** Inspired by Arts Action Against Domestic Violence's Silent Witness Exhibit in Minnesota (1990-1991), Janet Hagberg and other supporters launched a national initiative to reduce incidences of domestic violence in all fifty states. Records include a scrapbook (1993), newletters (1996-1999), press coverage and articles, and documentation of state-level efforts and of the national march and conference held in Washington, D.C. (1997). **Quantity:** 2.5 cu. ft. (3 boxes). **Location:** See Detailed Description for shelf locations.

Web Display Label	MARC Tag	EAD Tag	Attribute Values	Required
		\<head>	id="a1"	Mandatory
		\<unitid>	countrycode="US" repositorycode="MnHi"	Mandatory
Creator:		\<origination>	label="Creator:"	Mandatory
	100 110 111	\<persname> \<famname> or \<corpname>	role="creator" encodinganalog="*[MARC tag]*" *Enter the appropriate MARC encoding analog for the type of name heading:* 100 *Personal name* 100 *Family name* 110 *Corporate name* 111 *Meeting name*	Mandatory
Title:	245 $a	\<unittitle>	label="Title:"	Mandatory

			encodinganalog="245$a"	
Dates:	245 $f or 260 $c	<unitdate>	label="Date:" encodinganalog="245$f" or "260$c" normal="[*yyyy/yyyy*]" *Replace yyyy/yyyy with the date span for the entire collection.* type="inclusive"	Mandatory
Language:		<langmaterial>	label="Language of Materials:"	Mandatory
		<language> Enter each language in a separate <language> tag.	langcode="eng" *Enter the ISO 639-2b code for each language.*	Mandatory
Abstract:	520		label="Abstract:"	Mandatory
Quantity:	300	<physdesc>	label="Quantity:" encodinganalog="300"	Mandatory
Location:		<physloc>	label="Location:"	Mandatory

EAD Example	```<did>```
	``` <head id="a1">OVERVIEW</head>```
	``` <unitid countrycode="US" repositorycode="MnHi"> </unitid>```
	``` <origination label="Creator:">```
	``` <persname role="creator" encodinganalog="100">Dayton, Mark,```
	``` 1947-</persname>```
	``` </origination>```
	``` <unittitle label="Title:" encodinganalog="245$a">Mark Dayton```
	``` senatorial files.</unittitle>```
	``` <unitdate label="Date:" encodinganalog="245$f" normal="2001/2006"```
	``` type="inclusive">2001-2006.</unitdate>```
	``` <langmaterial label="Language of Materials">Materials in```
	``` <language langcode="eng">English.</language></langmaterial>```
	``` <abstract label="Abstract:">Personal and political records, legislative```
	``` records, Minnesota office files, press and media relations, and```
	``` office administration files of United States senator from```
	``` Minnesota, Mark Dayton, spanning 2001-2006.</abstract>```
	``` <physdesc label="Quantity:" encodinganalog="300">54.0 cu. ft.```
	``` (54 boxes).</physdesc>```
	``` <physloc label="Location:">See <ref target="a9">Detailed```
	``` Description</ref> for shelf locations.</physloc>```

	`</did>`

Unit Date

<unitdate>

Several attributes are specified in the <unitdate> given in an overview. These include *label*, *encodinganalog*, *type*, and *normal*. All four attributes are supplied in the MARC conversion and the EAD template.

However, while the *normal* attribute is automatically provided in the EAD template and the MARC2EAD conversion, processors must type over the boilerplate "yyyy/yyyy" with the specific year spans for each collection. Inclusive year spans are to be used.

Boilerplate EAD Template:	`<unitdate label="Date:" encodinganalog="245$f' normal="yyyy/yyyy" type="inclusive">` `<?replace_text {MARC 245 $f $g text}?>.` `</unitdate>`
Complete EAD Example:	`<unitdate label="Date:" encodinganalog="245$f' normal="2001/2006" type="inclusive">` 2001-2006. `</unitdate>`

Although the ideal situation would be to normalize all dates in the detailed description of a finding aid as well as in the overview, MHS will only encode the *normal* attribute in the overview section. Due to time constraints, MHS will not enter normalized dates at component levels in the detailed description <dsc>.

Language of Materials

<langmaterial>
   <language langcode="eng">

MHS began encoding language of materials with version 2002 in August 2008. This element provides information about the languages present in the collection.

The default value is English. If any portion of the materials in a collection is in another language, or if a collection is not in English, processors must modify the boilerplate. To add a second language, repeat the <language> element and encode the *langcode* attribute with the appropriate ISO 639-2b code. An alphabetical listing

of language codes is available on the Library of Congress standards site:
http://www.loc.gov/standards/iso639-2/php/English_list.php

Use proper grammar and punctuation to separate two or more \<language\> elements. Enter spaces as needed to separate text.

	EAD Example
One language	\<langmaterial label="Language of Materials"\>Materials in \<language langcode="eng"\>English\</language\> \</langmaterial\>
Multiple languages	\<langmaterial label="Language of Materials"\>Materials in \<language langcode="eng"\>English\</language\>, \<language langcode="ger"\>German\</language\> and \<language langcode="fre"\>French\</language\>. \</langmaterial\>

Location

\<physloc\>

When a collection consists of only one shelving location, such as in the case of microfilm collections, P-numbered collections, or when there is only one box, modify the standard boilerplate to include the call number.

Examples:

Location: M670: See Detailed Description for reel numbers.

Location: P2668: See Detailed Description for shelf locations.

BIOGRAPHICAL or HISTORICAL NOTE

\<bioghist encodinganalog="545"\>
\<head id="a2" altrender="[*biography* or *history]*"\>

The \<head\> element within a \<bioghist\> must include two attributes: *id* and *altrender*.

The *id* attribute is always coded as "*a2*."

The *altrender* attribute is used as a switch to trigger the appropriate button label on the navigation sidebar. Code the *altrender* attribute as either "*biography*" or "*history*" depending on the type of note that is provided.

Include only one main <bioghist> section.

Subsections for specific notes about multiple persons or corporate entities may be nested as additional <bioghist> elements inside the main <bioghist> section.

Type of Note	<head> attributes	EAD Examples
Biographical note for persons.	id="a2" altrender="biography"	<bioghist> <head id="a2" altrender="biography"> BIOGRAPHICAL NOTE</head>
Historical note for corporate bodies or for larger historical contexts.	id="a2" altrender="history"	<bioghist> <head id="a2" altrender="history"> HISTORICAL NOTE</head>

Subsection	EAD Examples
Biographical sketches for multiple persons.	<bioghist> <head id="a2" altrender="biography">BIOGRAPHICAL NOTE</head> <bioghist><head>Walter F. Mondale</head> Walter Frederick ("Fritz") Mondale, a native Minnesotan, has spent most of his life … </bioghist> <bioghist><head>Joan A. Mondale</head> Joan Adams Mondale was born … </bioghist> </bioghist>

Historical sketches for multiple corporate bodies or for notes that combine biographical sketches, corporate histories, and/or additional historical background.	<bioghist>
	    <head id="a2" altrender="history">HISTORICAL NOTE</head>
	    <bioghist><head>T. B. Walker</head>
	          Thomas Barlow Walker (1840-1928) was born at Xenia, Ohio
	            …
	    </bioghist>
	    <bioghist><head> Red River Lumber Company</head>
	         The Red River Lumber Company (RRLC) was organized in
	            1883 …
	    </bioghist>
	</bioghist>

Chronologies

<bioghist>
    <chronlist>

A chronology of significant dates and events may be used in place of or in addition to textual paragraphs within a biographical or historical note.

The web stylesheet outputs these chronologies in a two-column table. Date elements are always displayed before events.

Include *<listhead><head01>* and *<head02>* elements to provide column headers for Date and Event.

When multiple events occurred under a single event, use the *<eventgrp>* element to group the events together.

An Excel template (*Template_ChronologyList.xls*) may be used to simplify data entry.

A chronology may also be used in biographical/historical notes for series-level components that are encoded as *<c01 level="series">*.

Chronologies		
EAD Tag	**Attribute Values**	**Required**
<chronlist>	*No attributes are entered.*	Mandatory
<listhead>	*No attributes are entered.*	Mandatory
<head01>	*No attributes are entered.*	Mandatory – Enter *Date* as the text for the column header display
<head02>	*No attributes are entered*	Mandatory – Enter *Event* as the text for the column header display
<chronitem>	*No attributes are entered.*	Mandatory
<date>	era="ce" calendar="gregorian*"*	Mandatory
<eventgrp>	*No attributes are entered.*	Optional – Use when multuiple events are entered under a singe date
<event>	*No attributes are entered.*	Mandatory

EAD Example	`<bioghist>`

`<chronlist>`
  `<listhead>`
    `<head01>`
    `<head02>`
  `<chronitem>`
    `<date>`
    `<event>`
 	
Note: Use `<eventgrp>` to group multiple events under a single date:
    `<chronitem>`
      `<date>`
      `<eventgrp>`
        `<event>`
	`<head id="a2" altrender="biography">BIOGRAPHICAL NOTE</head>`
	  `<chronlist>`
	    `<listhead>`
	      `<head01>Date</head01>`
	      `<head02>Event</head02>`
	    `</listhead>`
	    `<chronitem>`
	      `<date era="ce" calendar="gregorian">1899</date>`
	      `<event>`Born April 4 in Chicago, Illinois, the second son of Lawrence J. Olson, a Baptist minister, and Ida May Cederholm.`</event>`
	    `</chronitem>`
	    `<chronitem>`
	      `<date era="ce" calendar="gregorian">1906</date>`
	      `<event>`Moved to northern Wisconsin, first to Sister Bay; then to Prentice; then Ashland.`</event>`
	    `</chronitem>`
	    `<chronitem>`
	      `<date era="ce" calendar="gregorian">1916</date>`
	      `<event>`Graduated from Ashland High School, Wisconsin.`</event>`
	    `</chronitem>`
	  `</chronlist>`
	  `<p>`Information for the chronology was compiled from the collection and from The Sigurd F. Olson Web Site produced by David Backes, University of Wisconsin-Milwaukee.`</p>`
	`</bioghist>`

Web Display	
	BIOGRAPHY OF SIGURD F. OLSON **Date**	**Event** 1899	Born April 4 in Chicago, Illinois, the second son of Lawrence J. Olson, a Baptist minister, and Ida May Cederholm. 1906	Moved to northern Wisconsin, first to Sister Bay; then Prentice; then Ashland. 1916	Graduated from Ashland High School, Wisconsin. 1916-1918	Attended Northland College in Ashland. 1918-1920	Attended University of Wisconsin in Madison, earning a bachelor's degree in agriculture. 1920-1922	Taught high school agriculture and geology courses in Nashwauk and Keewatin, Minnesota. 1921	Olson's first article, an account of a canoe expedition, published by the *Milwaukee Journal*, July 31. 1921	Married Elizabeth Dorothy Urenholdt from Seeley,

Tables -- `<bioghist>`

Other columnar tables may also be included within a biographical or historical note or subsection to provide information that can easily be categorized into two, three,

or four columns. The stylesheet will automatically space the columns for browser and print display.

Tables are encoded in a highly nested and particular manner: Accurate attribute encoding is especially critical to their proper display.

The "*cols="n"*" attribute must be included in the *<tgroup>* element to tell the stylesheet how many columns the table contains. Replace *"n"* with a number from 1-4 depending on the number of columns in your table.

Each row within the table are each encoded as *<row><entry colname="n">*, with *"n"* being replaced by a number from 1-4 that indicates the position of the column. The *colname* attribute must be included in each *<entry>* element to tell the stylesheet where each piece of information should appear.

Column headers that display as labels for each column are encoded as a single row of entries wrapped in a *<thead>* element. The stylesheet will automatically add bold face to these headers.

All of the row entries that make up the main body of the table are wrapped together in a single *<tbody>* element. There is no limit to the number of rows that can be included within the body of the table.

Tables		
EAD Tag	**Attribute Values**	**Required**
<head>	*No attributes are entered.*	Optional
<table>	*No attributes are entered.*	Mandatory
<tgroup>	cols="*n*" Enter the total number of table columns (2, 3, or-4).	Mandatory
<thead>	*No attributes are entered*	Mandatory
<tbody>	*No attributes are entered.*	Mandatory
<row>	*No attributes are entered.*	Mandatory
<entry>	colname="*n*" Enter the column number where each specific entry should appear.	Mandatory

Biographical/Historical Note: Table

| **EAD Example:**

<bioghist>
  <p>
  <table>
    <tgroup>
      <thead>
        <row>
        <entry>
      <tbody>
        <row>
        <entry> | `<bioghist>`
`<head id="a2" altrender="history">`HISTORICAL NOTE`</head>`
  `<p>`
    `<emph altrender="subhead">`U.S. Office of Indian Affairs,
       St.Louis, Missouri`</emph></p>`
  `<table>`
    `<tgroup cols="2">`
      `<thead>`
        `<row>`
          `<entry colname="1">`Agency`</entry>`
          `<entry colname="2">`Dates`</entry>`
        `</row>`
      `<thead>`
      `<tbody>`
        `<row>`
          `<entry colname="1">`Louisiana Territory Agency
          `</entry>`
          `<entry colname="2">`1807-1812`</entry>`
        `</row>`
        `<row>`
          `<entry colname="1">`Missouri superintendency`</entry>`
          `<entry colname="2">`1812-1821`</entry>`
        `</row>`
        `<row>`
          `<entry colname="1">`St. Louis Superintendency`</entry>`
          `<entry colname="2">`1822-1851`</entry>`
        `</row>`
        `<row>`
          `<entry colname="1">`Central Superintendency`</entry>`
          `<entry colname="2">`1851-1855`</entry>`
        `</row>`
      `</tbody>`
    `</tgroup>`
  `</table>`
`</bioghist>` |

| **Web Display** | ▼ HISTORICAL NOTE

U.S. OFFICE OF INDIAN AFFAIRS, ST.LOUIS, MISSOURI

Agency / Dates:
Louisiana Territory Agency — 1807-1812
Missouri Superintendency — 1812-1821
St. Louis Superintendency — 1822-1851
Central Superintendency — 1851-1855

Superintendents / Dates:
William Clark, Agent — 1807-1812
William Clark, Superintendent — 1812-1838
Joshua Pilcher, Superintendent — 1839-1841
David D. Mitchell, Superintendent — 1841-1844 |

SCOPE AND CONTENTS

```
<scopecontent encoinganalog="520">
    <head id="a3">
```

In addition to the abstract provided in the high-level overview, a fuller scope and content note may be included to describe the nature of large or complex collections. Typically, these notes are simply entered as textual paragraphs.

Tables -- <scopecontent>

In rare cases, where the contents of a collection have been fully analyzed, a table may be nested within the scope and contents note or as a separate *<scopecontent>* subsection to delineate specific categories of correspondents, corporate bodies, topical matter, or forms of material.

Tables are encoded in a highly nested and particular manner: Accurate attribute encoding is especially critical to their proper display.

The *cols="n"* attribute must be included in the *<tgroup>* element to tell the stylesheet how many columns the table contains. Replace *"n"* with a number from 1-4 depending on the number of columns in your table.

Each row within the table is encoded as *<row><entry colname="n">*, with *"n"* being replaced by a number from 1-4 that indicates the position of the column. The *colname* attribute must be included in each *<entry>* element to tell the stylesheet where each piece of information should appear.

Column headers that display as labels for each column within the table are encoded as a single row of entries wrapped in a *<thead>* element. The stylesheet will automatically add bold face to these headers.

All of the row entries that make up the main body of the table are wrapped together in a single *<tbody>* element. There is no limit to the number of rows that can be included within the body of the table.

This type of table may also be used in scope and content notes for series-level components that are coded as *<c01 level="series">*.

Tables		
EAD Tag	**Attribute Values**	**Required**

<head>	*No attributes are entered.*	Optional
<table>	*No attributes are entered.*	Mandatory
<thead>	*No attributes are entered*	Mandatory
<tgroup>	cols="*n*" Enter the total number of table columns (2, 3, or 4).	Mandatory
<tbody>	*No attributes are entered.*	Mandatory
<row>	*No attributes are entered.*	Mandatory
<entry>	colname="*n*" Enter the column number where each specific entry should appear.	Mandatory

---

Scope and Content Note: Table

EAD Example:

<scopecontent>
  <table>
    <tgroup>
      <thead>
      <tbody>
       <row>
        <entry>

```
<scopecontent>
  <head>Correspondents: Church Affairs</head>
  <table>
     <tgroup cols="3">
        <thead>
           <row>
              <entry colname="1">
                 <emph render="bold">Correspondent</emph>
              </entry>
              <entry colname="2">
                 <emph render="bold"/>Episcopate </entry>
              <entry colname="3">
                 <emph render="bold">Years</emph>
              </entry>
           </row>
        <thead>
        <tbody>
           <row>
              <entry colname="1">Anderson, David</entry>
              <entry colname="2">Bishop of Rubert's Land, 1849-
                 1864</entry>
              <entry colname="3">1861-1864</entry>
           </row>
           <row>
              <entry colname="1">Armitage, William
                 Edmond</entry>
              <entry colname="2">Assistant Bishop and Bishop of
                 Wisconsin, 1866-1873</entry>
              <entry colname="3">1866-1872</entry>
           </row>
           <row>
```

	`<entry colname="1">`Worthington, George`</entry>`
	`<entry colname="3">`1884-1893`</entry>`
	`<entry colname="2">`Bishop of Nebraska, 1885-1908`</entry>`
	`</row>`
	`</tbody>`
	`</tgroup>`
	`</table>`
	`</scopecontent>`

Web Display	▼ CORRESPONDENTS: CHURCH AFFAIRS
	<table><tr><th>Correspondent</th><th>Episcopate</th><th>Years</th></tr><tr><td>Anderson, David</td><td>Bishop of Rubert's Land, 1849-1864</td><td>1861-1864</td></tr><tr><td>Armitage, William Edmond</td><td>Assistant Bishop and Bishop of Wisconsin, 1866-1873</td><td>1866-1872</td></tr><tr><td>Barker, William Morris</td><td>Bishop of Western Colorado, 1893; Missionary Bishop of Olympia, 1894-1901</td><td>1892-1893, 1900</td></tr><tr><td>Beckwith, John Watrous</td><td>Bishop of Georgia, 1868-1890</td><td>1883</td></tr><tr><td>Bedell, Gregory Thurston</td><td>Assistant Bishop and Bishop of Ohio,1859-1889</td><td>1860-1889</td></tr><tr><td>Brewer, Leigh Richmond</td><td>Missionary Bishop of Montana, 1880-1916</td><td>1882-1887, 1900</td></tr></table>

ARRANGEMENT

`<arrangement encodinganalog="351">`
   `<head id="a4">`

Inventory Style	EAD Example

Simple Style: Series
 	
c01 level="series"
	`<list>`
	   `<item>` *First c01 Series Title* `</item>`
	   `<item>` *Second c01 Series Title* `</item>`
	   `<item>` *Third c01 Series Title* `</item>`
	`</list>`

Complex Style:
Series with Subseries
 	
c01 level="series"
and
c02 level="subseries"
	`<arrangement>`
	   `<head id="a4">`ARRANGEMENT`</head>`
	      `<p>`The collection is organized into the following
	         sections:`</p>`
	   `<list>`
	      `<head>`First c01 Series Title `</head>`
	         `<item>` First c02 Subseries Title `</item>`

	`<item>` Second c02 Subseries Title `</item>`
	`</list>`
	`<list>`
	    `<head>`Second c01 Series Title `</head>`
	      `<item>` First c02 Subseries Title `</item>`
	      `<item>` Second c02 Subseries Title `</item>`
	`</list>`
	`</arrangement>`

Mixed Style: Simple and Complex Series
 	
This style includes both complex series that contain subseries and simple series that do not contain subseries.
	`<arrangement>`
	  `<head id="a4">`ARRANGEMENT`</head>`
	    `<p>`These records are organized into the following sections:`</p>`
	`<list>`
	    `<head>`Women Historians of the Midwest`</head>`
	      `<item>`Administrative Records and Correspondence`</item>`
	      `<item>`Conferences`</item>`
	      `<item>`Subject Files`</item>`
	      `<item>`Other Miscellaneous Records`</item>`
	      `<item>`Workshops, Presentations, Speeches, and Talks`</item>`
	`</list>`
	`<list>`
	    `<head>`Women in World Area Studies Program Records`</head>`
	      `<item></item>`
	`</list>`
	`<list>`
	    `<head>`Upper Midwest Women's History Center Records`</head>`
	      `<item></item>`
	`</list>`
	`<list>`
	    `<head>`Curriculum Material`</head>`
	      `<item></item>`
	`</list>`
	`<list>`
	    `<head>`Reserve Item`</head>`
	      `<item></item>`
	`</list>`
	`</arrangement>`

OTHER FINDING AIDS

```
<otherfindaids encodinganalog="555">
    <head id="a6">
```

This element is used to draw a researcher's attention to other finding aids that act as fuller indexes to the contents of a collection. Self-referential notes that highlight the existence of a printed version of an inventory should not be included.

ADMINISTRATIVE INFO

<dscgrp type="admininfo">
    <head id="a8">

Notes regarding restrictions, preferred citation, alternative formats, microfilm production, digital master files, originals, duplicates, acquisition, processing, and other details pertinent to the administration and management of the collection are grouped together in a section containing administrative information.

Only three note fields are mandatory: preferred citation, accession information, and MMS catalog ID number. Other notes are included when required by the conditions of a collection.

Individual notes within the Administrative Information section are headed by a standard label typed in title case format that ends with a colon.

Whenever applicable, each note should include an *encodinganalog* attribute that corresponds to its crosswalked MARC tag. Note labels for MARC tags 530 and 535 can be modified as necessary to fit the specifics of a collection.

Restrictions

Restrictions that have been imposed on either access or use must be stated when appropriate. Access restrictions are coded as <accessrestrict>. Use restrictions on copyright, publication, and reproduction are coded as <userestrict>.

Whenever either an access or use restriction is added to the <descgrp>, the web and print stylesheets display a boilerplate statement at the top of an inventory. The boilerplate states "Access to or use of this collection is currently restricted. For Details, see the Restrictions Statement." When a user clicks on this statement in a web display, the statement will link to the fuller notes given in the Administrative Information.

When specific restrictions exist on only parts of a collection, the restrictions must also be stated at the appropriate component levels within the detailed description.

Preferred Citation

The preferred citation contains a standard recommendation for bibliographic citations to the contents of a collection. Both the MARC conversion and the template supply boilerplate that processors will need to modify by entering the citation form of the collection's title.

Accession Information

All accession numbers related to a particular collection must be listed in this note. The names of donors and the dates of accessions are not included.

Processing Information

Information about when the collection was processed and by whom, when additions were made and by whom, and when materials are digitized and by whom may also be included.

For collections that are also cataloged in MARC, the MMS catalog ID number for the MARC record is mandatory.

Grant Funding

A statement and funding logo should be added to either the accession or processing information notes whenever processing or acquisition of a collection has been supported by a publicly acknowledged grant or gift.

```
<p><extptr show="embed" altrender="right" title="Legacy Amendment logo"
href="images/legacylogo_thumb.jpg"/></p>
```

```
<p>Digitization was made possible by the Arts and Cultural Heritage Fund through
the vote of Minnesotans on November 4, 2008.</p>
```

Legacy funded digitization work should be included in processing information with the logo inserted first in the section, directly after the head for display reasons.

Note Labels	EAD Examples	Required
Access Restrictions:	`<accessrestrict encodinganalog="506">` `<head>Access Restrictions:</head>` `<p>Until 2025, access to … </p>`	Required when applicable

Use Restrictions:	`<userestrict encodinganalog="540">` `<head>`Use Restrictions:`</head>`	Required when applicable
Alternate Form Available:	`<altformavail encodinganalog="530">` `<head>`Alternate Form of Material:`</head>`	Required when applicable
Preferred Citation:	`<prefercite encodinganalog="524">` `<head>`Preferred Citation:`</head>`	Mandatory
Microfilm Production:	`<odd>` `<head>`Microfilm Production:`</head>`	Required when applicable
Location of Master Files:	`<originalsloc>` `<head>`Location of Master Files:`</head>`	Required when applicable
Location of Originals:	`<originalsloc encodinganalog="535">` `<head>`Location of Originals:`</head>`	Required when applicable
Location of Duplicates:	`<originalsloc encodinganalog="535">` `<head>`Location of Duplicates:`</head>`	Required when applicable
Provenance:	`<custodhist encodinganalog="561">` `<head>`Provenance:`</head>`	Required when applicable
Accession Information:	`<acqinfo encodinganalog="541">` `<head>`Accession Information:`</head>`	Mandatory

Processing Information:	`<processinfo>`
	`<head>`Processing Information:`</head>`
	`<p>`Processing of the X papers was supported by a grant from …`</p>`
	`<p>`Processed by: *Name, date.*`</p>`
	`<p>`Digitized by: *Name or Minnesota Historical Society, date.*`</p>`
	`<p>`Digitization of *X* was made possible by *the fund*…`</p>`
	`<p>`Catalog ID Number: *MMS catalog number.*`</p>`
		Processing data is optional.
		
		Catalog ID Number is mandatory.

Appraisal Information:	`<appraisal encodinganalog="583">` `<head>`Appraisal Information:`</head>`	Optional

Web Display	▼ ADMINISTRATIVE INFORMATION
	Access Restrictions: Civil War Correspondence (1.0 cubic feet) is closed to general use. Researchers are directed to use the digital versions or microfilm. Digitized originals are closed. Access and use requires the curator's permission. Some of these files are located off site in Remote Storage. Advance arrangements are required in order to view the files. Please consult reference staff for more information. **Preferred Citation:** *[Indicate the cited item and/or series here].* James C. Christie and Family Papers. Minnesota Historical Society. *See the Chicago Manual of Style for additional examples.* **Microfilm Production:** Microfilmed Civil War Correspondence. Microfilm (M539). St. Paul: Minnesota Historical Society, 1989. 3 rolls positive microfilm. Microfilm available for interlibrary loan or sale from the Minnesota Historical Society. Inquiries regarding purchases by non-Minnesota residents and institutions should be directed to LexisNexis. **Alternate Form Available:** Selected letters from the Civil War correspondence are also available on the Minnesota Historical Society web site. **Provenance Note** The Christie Family Papers are composed of three separate collections (P1281, P1282, P1283) of letters and other papers from several generations of the Christie family. The Christie papers were originally given to the Minnesota Historical Society in 1965 by a descendent of Sarah Christie Stevens (1844-1919), and were cataloged as a single collection. As more additions were received, the single collection was divided into three: the papers of James, Thomas, and David. **Accession Information:** Accession number: 9920; 11,836; 11,841; 11,904; 11,983; 11,984; 11,985; 11,957; 11,958; 11,959; 11,962; 11,963; 12,054; 12,074; 12,110; 12,121; 12,138; 12,442; 13,255; 14,178; 14,860; 15,918; 16,367; 16,186; 16,219; 16,843; 17,608 **Processing Information:** Processing and cataloging of this collection was supported with a Basic Project grant awarded by the National Historical Publications and Records Commission (NHPRC). **NHPRC** DOCUMENTING DEMOCRACY Digitized by: Minnesota Historical Society, September 2019 Catalog ID number: 990017304560104294 Return to top

Web Display	▼ ADMINISTRATIVE INFORMATION **Access Restrictions:** Access to the master copies is restricted and requires the permission of the sound and visual curator. **Preferred Citation:** *[Indicate the cited item and/or series here]. Albinson, Elmer. Grand Portage Footage. Minnesota Historical Society.* *See the Chicago Manual of Style for additional examples.* **Accession Information:** Accession number: AV1987.327 **Location of Master Files:** Digital masters of film recordings and audio reels are maintained on the Society's secure digital collections storage servers and are managed and preserved in accordance with archival best practices. The original audio reels were disposed after the material was digitally reformatted into WAV files. **Processing Information:** Digitization was made possible by the Arts and Cultural Heritage Fund through the vote of Minnesotans on November 4, 2008. Digital video and audio transferred from the master film recordings and audio reels by the Minnesota Historical Society for preservation purposes (September 2019). Catalog ID number: 990016645510104294 CLEAN WATER LAND & LEGACY AMENDMENT Return to top

DETAILED DESCRIPTION

<dsc>
   <head id="a9">

Series, subseries, and the contents of containers are listed as hierarchically nested components in the Detailed Description.

The minimal mandatory elements that are included within each component as appropriate are:
   <physloc>
   <container>
   <unititle>
   <unitdate>

        <physdesc>
        <langmaterial>

        <accessrestrict>
        <userestrict>

Optional component elements

The following additional optional EAD elements can be used within each component to describe particular aspects of the component.   <p> tags must be used within each of these tags, into which the content is placed. The <head> element within each of these elements is not used at the component level as standard practice at this time.

scopecontent
bioghist
arrangement
userestrict
accessrestrict
processinfo
acqinfo
accruals
appraisal
custodhist
controlaccess
phystech
altformavail
bibliography
relatedmaterial
separatedmaterial
originalsloc
odd
note
otherfindaid
descgrp

Any number of these tags may be used in any combination within a single component.

| **EAD Example**

\<scopecontent\>
  \<p\>
\<altformavail\>
  \<p\> | \<c01\>
  \<did\>
    \<physloc\>64.C.5.3\</physloc\>
    \<unittitle\>Diaries and transcripts,\</unittitle\>
    \<unitdate\>1897-1901.\</unitdate\>
  \</did\>
  \<scopecontent\>
    \<p\>Daily diaries are accompanied by typed transcripts.\</p\>
  \</scopecontent\>
  \<altformavail encodinganalog="540"\>
    \<p\>Also available in pdf format:\</p\>
    \<p\>\<extref show="new" actuate="onrequest"
        href="00718/pdf/00718_MTH1897.pdf"\>
      1897 diary transcript
    \</extref\>\</p\>
  \</altformavail\>
\</c01\> |

| **Web Display** | **Location**
64.C.5.3   Diaries and transcripts, 1897-1901.
                  Daily diaries are accompanied by typed transcripts.
                  Also available in pdf format:
                  1897 diary transcript |

Using boldface to distinguish between elements

While not required, using boldface to distinguish between elements within a component level can be helpful to those using EADs. It allows users to view the elements separately rather than have the display run them together, and provides a label for the paragraph.

EAD Example
 	
<bioghist>
** <p><emph render="bold>**
 	
<scopecontent>
** <p><emph render="bold>**
	<c01 level="series">
	  <did>
	    <unittitle>Abdiaziz Abdi</unittitle>
	  </did>
	  <bioghist>
	    <p><emph render="bold">Biographical Information: </emph>Abdiaziz Abdi was born in Mogadishu, Somalia in the 1970s and spent his childhood in Mogadishu. He migrated to Egypt in the 1990s and studied English literature at Al-Azhar University. In 2006, Abdiaziz immigrated to the United States, arriving in Rochester, Minnesota. After earning his undergraduate degree at Winona State University, Abdiaziz went on to pursue a master's degree in clinical counseling psychology. He is a mental health advocate.</p>
	  </bioghist>
	  <c02>
	    <did>
	      <physloc>OH 176.1</physloc>
	      <unittitle>Oral history interview with Abdiaziz Abdi, </unittitle>
	      <unitdate>August 31, 2014. </unitdate>
	      <physdesc> 1 master audio file: digital, WAV (1 hour, 15 minutes), 1 user audio file: digital, MP3, and 1 transcript (19 pages).</physdesc>
	    </did>
	    <scopecontent>
	      <p>
	        <emph render="bold">Subjects discussed:</emph> Education in Somalia, Somali civil war, fleeing the war, war casualties, impact of violence on children, leaving Somalia for Egypt, education in Egypt, immigration to the United States, education in the United States, motivations for studying psychology, psychological disorders in the Somali community, cultural change in Somalia, Somalis in Rochester and Greater Minnesota, challenges facing Somalis in Rochester, immigrant identity, similarities between Somali and Jewish diasporas, and the future of Somalis in Minnesota.</p>
	      <p><emph render="bold">Interviewed by:</emph> Ibrahim Hirsi in Rochester.</p>
	      <p>The transcript has been reviewed and edited by the interviewee.</p>
	    </scopecontent>
	    <daogrp>
	      <daodesc>
	        <p>Digital version</p>
	      </daodesc>
	      <daoloc role="reference" href="http://collections.mnhs.org/cms/display.php?irn=11474444"/>
	      <daoloc role="thumbnail" title="Oral history interview with Abdiaziz Abdi, August 31, 2014." altrender="left" href="icons/headphones_icon_small.jpg"/>
	    </daogrp>
	    <daogrp>
	      <daodesc>
	        <p>Digital version</p>
	      </daodesc>
	      <daoloc role="reference" href="http://collections.mnhs.org/cms/display.php?irn=11474444#transcript"/>
	      <daoloc role="thumbnail" title="Transcript of oral history interview with Abdiaziz Abdi, August 31, 2014." altrender="left" href="oh176/images/transcript.jpg"/>
	    </daogrp>
	  </c02>
	</c01>

Web Display	▼ ABDIAZIZ ABDI
	
	Biographical Information: Abdiaziz Abdi was born in Mogadishu, Somalia in the 1970s and spent his childhood in Mogadishu. He migrated to Egypt in the 1990s and studied English literature at Al-Azhar University. In 2006, Abdiaziz immigrated to the United States, arriving in Rochester, Minnesota. After earning his undergraduate degree at Winona State University, Abdiaziz went on to pursue a master's degree in clinical counseling psychology. He is a mental health advocate.
	
	Location
	
	OH 176.1 Oral history interview with Abdiaziz Abdi, August 31, 2014. 1 master audio file: digital, WAV (1 hour, 15 minutes), 1 user audio file: digital, MP3, and 1 transcript (19 pages).
	
	    Subjects discussed: Education in Somalia, Somali civil war, fleeing the war, war casualties, impact of violence on children, leaving Somalia for Egypt, education in Egypt, immigration to the United States, education in the United States, motivations for studying psychology, psychological disorders in the Somali community, cultural change in Somalia, Somalis in Rochester and Greater Minnesota, challenges facing Somalis in Rochester, immigrant identity, similarities between Somali and Jewish diasporas, and the future of Somalis in Minnesota.
	
	    Interviewed by: Ibrahim Hirsi in Rochester.
	
	    The transcript has been reviewed and edited by the interviewee.
	
	    Digital version
	
	    Digital version
	
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For greater information about MHS standards related to the encoding of components, see the guidelines for detailed descriptions (*FindingAids_DetailedDescriptionGuidelines.doc*).

Location and Container Information

<physloc>   <container>

The display of location and container information is controlled by the pairing of <physloc> and <container> tags. Physical locations are always displayed flush left in the first column of a detailed description. Container information is always displayed in the second column.

The existence of a <physloc> is required for column labels to be displayed.

A default "Location" label over the <physloc> column is always displayed when a <physloc> exists. No type attribute should be added to a <physloc> as the default label should always state "Location." MNHS uses <physloc> to provide information about where materials are stored and to provide shelving locations or call numbers.

When a <container> is paired with a <physloc>, labels are displayed above both columns. The default container label is displayed as "Box."

When a <container> is <u>not</u> paired with a <physloc>, no container label is displayed.

Type attributes can be added to <container> to display labels for atypical housings (those that are not a box).

Container type attributes must be entered in all lower case and can not contain any spaces. The xslt stylesheet will automatically capitalize the first letter for web and print display.

Both the width of the display columns and the need to use specific but standard terminology should be considered when type attributes are used to generate shelving and container labels. Labels should be kept short in order to generate a clean display. Standard terms are to be used so that both staff and the public can interpret information necessary for retrieval.

While the EAD standard does allow multiple <physloc> and <container> elements within a single <did>, MNHS only uses one of each element.

EAD Tags	Standard Container Type Attribute Values
<container type="*x*">	file folder image master negative number print reel submaster tube

Web Displays	

Default	**Location** **Box**		
	P823	39	Copies of Letterbooks:
			Letterbooks 1 and 2, 1857-1859.
			Letterbook 3, February 23, 1861-May 14, 1862.
		40	Letterbook 3, June 26, 1862-August 11, 1864.
			Letterbooks 4 and 5, October 1862-186?.
		41	Volume 1. Letterbook 1, 1857, 1859.
			Volume 2. Letterbook 2, July 12-30, 1859.
<container type="reel">	**Location** **Reel**		
	M623	2	American Fur Company account book, Retail Store, 1824-1827. 373 pages.
			American Fur Company, Northern Department account book, 1834-1848. 236 pages.
<container type="packet">	**Location** **Packet**		
	121.J.1.3	[D]	3998-3999, 4017-4020, 4022-2023, 4026, 4918, 5049, 5335, 5424, 5519.
		[E]	Prison staff, [ca. 1915]. 9 plates.
		[F]	Prison dogs and miscellaneous inmates, [ca. 1915]. 5 plates.
		[G]	Prison offices and medical examining rooms. [ca. 1915]. 8 plates.

Open Space in Containers

<odd>
   <p>

Open space remaining in a container that could be filled by later additions is noted as other descriptive data in the last component of the container.

EAD Example **<odd >** **<p>**	<c03> <did> <unittitle> Ramsey County Government reorganization, </unittitle> <unitdate >October 1975.</unitdate> </did> <odd> [.5 cubic feet empty, letter sized] </odd> </c03>

Web Display	Ramsey County Government reorganization, October 1975. *[.5 cubic feet empty, letter sized]*

Published Materials

<imprint>
    <geogname>
    <publisher>
    <date>

Imprint information regarding place of publication, publisher, and publication date can be coded as part of a <unittitle>. Follow AACR2 rules for the order of elements and proper punctuation.

| EAD Example

<imprint>
  <geogname>
  <publisher>
  <date> | <c01>
    <did>
       <unittitle> Metropolitan policy and metropolitan development : a proposal
          for governmental organization in the Twin Cities area.
         <imprint>
            <geogname> Minneapolis, Minn.: </geogname>
            <publisher> Metropolitan Development Guide Committee, </publisher>
            <date>1968. </date>
         </imprint>
       </unittitle>
    <did>
<c01> |

RELATED MATERIAL

<relatedmaterial encodinganalog="544">
    <head id="a5">

Related material notes should be used sparingly to identify collections that are very closely related by provenance and that are also available in the collections of the Minnesota Historical Society.

Topically related material that users can easily find through MnPALS or the federated search system should not be included here.

When revising a legacy finding aid, related material notes should be carefully evaluated for the value they add to a users understanding.

Web Display	▼ RELATED MATERIAL
	Whipple's official diocesan diaries and a small quantity of his correspondence are found among the papers of the Protestant Episcopal Church, Diocese of Minnesota. Additional Whipple personal correspondence as well as papers relating to his children and grandchildren are cataloged as the Whipple-Scandrett Family Papers. Two scrapbooks (1850-1932) kept by Whipple and members of his family are also available on microfilm. Whipple's photograph collection is available in the Photo & Art Database. These photographs consist primarily of views of Native American Indians from the midwestern United States. Minnesota views include people and buildings at Morton and Birch Coulee and on the White Earth Indian Reservation. Other images focus on the Episcopal ministry at these locations, Henry B. Whipple, his family and home, Reverend Henry Whipple St. Clair, and the Shattuck and St. Mary's schools in Faribault, Minnesota. Return to Top

SEPARATED MATERIAL

<separatedmaterial encodinganalog="544">
<head id="a5a">

Brief information about the availability and location of parts of a collection that exist in another repository or that have been removed from the Minnesota Historical Society should be provided as a note about separated material.

CATALOG HEADINGS

> **<controlaccess>**
> **<head id="a7">**

Name, subject, geographic places, genre, occupation, titles, and function headings that are added to a MARC record are also included here. Because catalog headings are controlled by authorized vocabularies, their EAD form must match their corresponding MARC record.

When the MARC2EAD conversion is used, MARC added access points are automatically transformed into xml.

Each type of access point is nested as a subset of <controlaccess> elements within a main <controlaccess> section. Standard textual labels are provided by adding a <head> element. Because these head labels are not linked anywhere, no *id* attribute is entered. Appropriate MARC encoding analogs are added to each specific heading within each subset.

Head Labels	EAD Examples	Required
Topics:	<controlaccess> <head>Topics:</head> <subject encodinganalog="650">	Required when applicable

Persons:	<controlaccess> <head>Persons:</head>
	    <persname role="subject"
	        encodinganalog="600">
	    <persname role="creator"
	        encodinganalog="700">
		Required when applicable

Organizations:	<controlaccess> <head>Organizations:</head>
	    <corpname role="subject"
	        encodinganalog="610">
	    <corpname role="creator"
	        encodinganalog="710">
		Required when applicable

Meetings:	<controlaccess> <head>Meetings:</head>
	    <corpname role="subject"
	        encodinganalog="611">
	    <corpname role="creator"
	        encodinganalog="711">
		Required when applicable

Places:	<controlaccess> <head>Places:</head> <geogname encodinganalog="651">	Required when applicable
Document Types:	<controlaccess> <head>Types of Documents:</head> <genreform encodinganalog="655">	Required when applicable

Occupations:	`<controlaccess> <head>Occupations:</head>` `<occupation encodinganalog="656">`	Required when applicable

Titles:	`<controlaccess> <head>Titles:</head>`
	     `<title encodinganalog="630">`
	     `<title encodinganalog="730">`
	     `<title encodinganalog="740">`
		Required
		when applicable

Functions:	`<controlaccess> <head>Functions:</head>` `<function encodinganalog="657">`	Required when applicable

Web Display	**CATALOG HEADINGS**
	
	This collection is indexed under the following headings in the catalog of the Minnesota Historical Society. Researchers desiring materials about related topics, persons or places should <u>search the catalog</u> using these headings.
	
	Topics:
	    Authors and publishers -- Minnesota.
	    Canoes and canoeing.
	    Conservation of natural resources -- Minnesota.
	    Environmental protection.
	    Forests and forestry-- Minnesota.
	    Mines and mineral resources -- Minnesota.
	    National parks and reserves.
	    Natural history.
	    Waterways.
	    Wilderness areas -- Minnesota.
	    Wilderness areas -- Ontario.
	    Wildlife conservation -- Law and legislation.
	    Wolves -- Research.
	    Voyages and travels.
	Places:
	    Boundary Waters Canoe Area (Minn.).
	    Quetico Provincial Park (Ont.).
	    Quetico-Superior area (Ont.-Minn.).
	    Superior National Forest (Minn.).
	Persons:
	    Douglas, William O. (William Orville), 1898-
	    Hubachek, Frank Brookes, 1894-
	    Kelly, Charles Scott, 1899-1987.
	    Leopold, Aldo, 1886-1948.
	    Magie, Bill, 1902-.

FONT EMPHASIS

<emph>

The xslt stylesheet automatically transforms font face, size, and emphasis for most headings, subheadings, and paragraphs. When necessary, bold, italic, subheading, or underlined emphasis can be added to text by wrapping the text within an <emph> tag.

Emphasis tags can not be used for external references or digital archival object descriptions because the added emphasis disables hyperlinks.

<emph> attributes	EAD Examples	Display

render="bold"	`<entry colname="1">`
	    `<emph render="bold">`
	        Correspondent`</emph>`
	`</entry>`
		Correspondent

render="italic"	`<p>`
	    … reported in the `<emph render="italic">`Pioneer Press `</emph>` on December 12, 1914
	`</p>`
		reported in the *Pioneer Press* on December 12, 1914

altrender="subhead"	`<p>`
	    `<emph altrender="subhead">` Church Affairs`</emph>`
	`</p>`
		CHURCH AFFAIRS

render="underline"	`<p>`
	    `<emph render="underline">`Henry B. Whipple`</emph>` was born ...
	`</p>`
		<u>Henry B. Whipple</u> was born ...

EXTERNAL REFERENCES

<extref show="new" actuate="onrequest" href="[url]">

External links to other Internet resources may be included anywhere within an inventory by using the <extref> element.

To add external links to an inventory, two <extref> attributes are required:

    actuate="onrequest"
    href="*linking url*"

To open a linked resource in a new browser window, one attribute is required:
    Show="new"

When an external resource will be loaded on the Web server in the same folder as the finding aid (*www.mnhs.org/library/findaids*), provide only the filename and extension of the linked resource.

    Example: href="00690/walker_1.htm"

When an external resource is stored in a subfolder of the finding aids directory, state the relative path of the folder and provide the filename.

 Example: href=p2668/"images/pt131103_thumb.jpg"

When an external resource is loaded on another Web server or in another set of folders than the finding aid, include the Internet protocol, absolute path, and filename.

 Example: href="http://www.mnhs.org/library/tips/history_topics/133women_military_image0201.htm"

Both the EAD template and the MARC2EAD conversion already include an external link to the library catalog within the Catalog Headings section. No modification of the xml coding for the link is necessary.

<extref> attributes	Attribute Values	Required
actuate	onrequest	Mandatory
audience	external	Optional
linktype	simple	Optional
show	new This attribute is used to indicate that a linked resource opens a new browser window.	Required when applicable
href	*path/filename.jpg* Enter the *path* and */filename* that identifies the url for the image you wish to display, e.g. *00697/images/mondaleVP.jpg*	Mandatory

EAD Examples

<scopecontent>
    <p>A roster of WASP pilots. The volume contains a dedication to WASP pilots killed in
        service, and lists the name of Virginia M. Hope.</p>
    <p>View
        <extref href="http://www.mnhs.org/library/tips/history_topics/133women_military_
        image0201.htm" actuate="onrequest" show="new" linktype="simple">
        selected pages</extref> from this roster.</p>
</scopecontent>

<relatedmaterial>
        <head id="a5">RELATED MATERIALS</head>
        <p>Books by Gilbert Wilson, including <emph render="italic">Agriculture of the Hidatsa
            Indians: An Indian Interpretation</emph>, <emph render="italic">Goodbird the
            Indian: His Story</emph>, <emph render="italic">Waheenee: An Indian Girl's
            Story</emph>, <emph render="italic">Myths of the Red Children</emph>, and
            <emph render="italic">Indian Hero Tales</emph> are separately cataloged in the
            Minnesota Historical Society book collection. </p>

```
            <p>The <extref linktype="simple" show="new" href="http://search.mnhs.org/index.php?
                q=%22Gilbert+L.+and+Frederick+N.+Wilson+Collection%22&amp;brand=cms">
                Gilbert L. and Frederick N. Wilson collection of three dimensional objects</extref> is
                in the Minnesota Historical Society museum collection. </p>
</relatedmaterial>
```

```
<otherfindaid encodinganalog="555">
        <head id="a6">OTHER FINDING AIDS</head>
        <p>An alphabetical index to the files <extref actuate="onrequest"
            href="gr00056/pdf/adjgWWIdisalloweds.pdf"> in pdf format.</extref></p>
 </otherfindaid>
```

```
<c01>  <did>  <physloc…    </did>
    <altformavail>
        <p>Also available in
            <extref href="ober08.pdf" actuate="onrequest" show="new">pdf format</extref>.</p>
    </altformavail>
</c01>
```

```
<controlaccess>
    <head id="a7">CATALOG HEADINGS</head>
        <p>This collection is indexed under the following headings in the catalog of the Minnesota
            Historical Society. Researchers desiring materials about related topics, persons or
            places should  <extref linktype="simple" show="new" href="http://mnhs.mnpals.net">
            search the catalog</extref>  using these headings.</p>
<controlaccess>
```

IMAGES AND DIGITAL ARCHIVAL OBJECTS

Digital images in jpg, bmp or png file formats can be added to inventories for illustrative purposes and to represent collection content. TIF images can not be embedded as illustrative images because browsers do not support the TIF file format.

Images can also be used to link to other Web pages, such as Collections Online or other digitized content. The stylesheet contains three different options for displaying digital images: 1. embedded images for illustrative purposes; 2. embedded images that link to other web pages; and 3. thumbnail images of digital archival objects that link to larger views of digitized collection content.

Images embedded within an inventory must be scaled to the exact dimensions for their web display. Images displayed within biographical and scope notes may be scaled at a larger size than images displayed within the detailed description. Maximum screen width is 564 pixels. Images are best kept well under 300 pixels wide.

In order to save web screen real estate and to provide uniformity within and across inventories, thumbnail images used to represent digital archival objects are to be scaled to

90 pixels at their longest dimension. Exceptions to the standard thumbnail size may occur for panoramic or other items of unusual shape.

1. Illustrative Images

\<p\>
   \<extptr actuate="onload" show="embed" altrender="[*left* or *right*]" title="[*alt mouseover*]" href="[*url*]"\>

At the \<archdesc\> level, an \<extptr\> can be used to display an image within biographical and historical notes, scope and content notes, related and separated material notes, and administrative information fields.

Each \<extptr\> must be coded within a paragraph \<p\>.and requires several attributes.

\<extptr\> attributes	Attribute Values	Required
actuate	onload	Mandatory
audience	external	Optional
linktype	simple	Optional
show	embed	Mandatory
altrender	*left* *right* Enter either "left" or "right" to instruct the stylesheet to display the image either flush against the left margin or flush right.	Mandatory
href	*path/filename.jpg* Enter the *path* and *filename* that identifies the url for the image you wish to display, e.g. *images/mondaleVP.jpg*	Mandatory
title	Enter a title for the item that will display as a mouseover \<alt\> tag. An abbreviated title is appropriate if necessary.	Mandatory

EAD Example:
 	
\<p\>
\<extptr\>
	\<bioghist\>
	\<p\>
	   \<extptr
	      actuate="onload"
	      audience="external"
	      linktype="simple"
	      show="embed"
	      altrender="right"
	      href="00697/images/mondaleVP.jpg"

| | title="Vice President Walter Mondale, 1977"
/>
Walter Frederick ("Fritz") Mondale, a native Minnesotan, has spent most of his life in public service …
</p>
</bioghist> |

Web Display

▼ BIOGRAPHICAL NOTE

Walter Frederick ("Fritz") Mondale, a native Minnesotan, has spent most of his life in public service, at the state, national, and international levels. A liberal Democrat and an influential strategist in Minnesota's Democratic-Farmer-Labor Party, he has held the offices of Minnesota attorney general (1960-1964), United States Senator from Minnesota (1964-1976), Vice President of the United States (1977-1981), Democratic Party candidate for President (1984), and ambassador to Japan (1993-1996).

The trajectory of his career placed him at the center of actions and events that transformed the Democratic Party, the face of American politics, and the character of the nation. He is most commonly viewed as a traditional New Deal liberal, and this characterization is to a large extent accurate, but falls far short of a full definition of the man. Reserved and cautious by nature, a problem-oriented gradualist, lacking the innate charisma and ebullience of his mentor Hubert Humphrey, and never fully comfortable in front of the television cameras, Mondale's inclination has been to work

2. Linked Images

> **\<p\>**
> > **\<extref\>**
> > > **\<extptr\>**

Images can link to other web pages, such as a larger views or pre-coordinated searches in Collections Online, by wrapping an external reference \<extref\> around an extended pointer \<extptr\>.

Each \<extref\>\<extptr\> must be coded within a paragraph \<p\>.

Include the attribute *show="new"* when you wish the link to open in a new window.

\<extref\> attributes	Attribute Values	Required
actuate	onrequest	Mandatory
audience	External	Optional
show	*new* *Include this attribute only when the link is to open in a new window.*	Required when applicable
href	*url*	Mandatory

	Enter the *"url"* for the target link.	

EAD Example:
 	
<p>
<extref>
<extptr>
	`<bioghist>`
	`<p>`
	`    <extref`
	`        actuate="onrequest"`
	`        show="new"`
	`        audience="external"`
	`        href="http://collections.mnhs.org/visualresources/image.cfm?i`
	`            mageid=145952">`
	`        <extptr`
	`            actuate="onload"`
	`            audience="external"`
	`            linktype="simple"`
	`            show="embed"`
	`            altrender="left"`
	`            href="00697/images/pof01932.jpg"`
	`            title="Mondale DFL political poster, 1970"/>`
	`    </extref>`
	`    Mondale's entry into national politics came at the 1964 Democratic`
	`        National Convention …`
	`</p>`
	`</bioghist>`

3. Digital Archival Objects

```
<daogrp>
    <daodesc>
    <daoloc role="reference" href="[url]">
    <daoloc role="thumbnail" title="[alt mouseover]" altrender="left" href="[url]">
```

To draw a reader's eye to linked digital content listed in the detailed description, a thumbnail image can be added to any component level. These images and external links are coded as groups of digital archival objects. The <daogrp> element contains both a description of the linked content or file format and the electronic location (url) of each object.

A <daogrp> can be added to component levels 1-6. Each <daogrp> contains one <daodesc> and two <daoloc> tags.

Each <daodesc> contains one <p> that provides a very brief textual description of the content or file format of a digital object. The text is displayed as a hyperlink within the inventory. Fill in <p> as follows:

Digital version

If the object is an item, an entire folder or series of digitized material where we retain the physical materials.

Digital *file type*
If the digital version is the only version we retain, e.g. Digital video, Digital audio Digital image.

Selected digital versions
If the object contains selected items of a folder or series

Specific item or folder information
If the object requires more specific designation than "Digital version" or a file format, give a title, date, or file name to provide distinctive information about the object.

Part 1 – Digital version
If the digital object is one part of a split pdf/a.

Part 2 – Title of specific item
If the digital object is one part of a split pdf/a, which is a single object (e.g. folder) contained within a collapsed description.

One <daoloc> tag with a *role* attribute of "thumbnail" is used to display an image within the inventory. The *href* attribute contains the path and filename of the scan that is to be displayed. The *altrender* attribute is coded as "left," "right," "top," "bottom," or "middle" depending upon the desired position of the image. For display uniformity, left is the standard value for the *altrender* attribute.

A second <daoloc> with a *role* attribute of "reference" is used to link the inventory to another web page that displays a larger, more viewable version of the digital object and may contain additional information about the item

Each <daoloc> must be coded with the attributes listed in the table below:

<daoloc> attributes	Attribute Values	Required
audience	external	Optional
altrender	*left* *right* *top* *bottom* *middle*	Mandatory (thumbnails only)
role	*reference* *thumbnail*	Mandatory

	Enter "*reference*" to specify that the <daoloc> is a large viewing-sized image that will link out from the inventory. Enter "*thumbnail*" to specify that the <daoloc> is a link to a small thumbnail-sized image that will be displayed within the inventory.	
href	*url* *path/filename* For links to reference-sized pages, enter the *url* or the *path* and *filename* of the url for the target link. For thumbnail-sized images, enter the *path* and *filename* for the url of the image, e.g. 00690/*images/05011_thumb.*	Mandatory
title	Enter a caption title for the image that will display as an <alt> tag in the mouseover.	Mandatory (thumbnails only)

|	

EAD Example:
 	
Selected digital images.
 	
<daogrp>
  <daodesc>
  <daoloc>
  <daoloc>
	<c01>
	    <did>
	      <physloc>P2668</physloc>
	      <container>15</container>
	      <unittitle>Photographs:</unittitle>
	      <physdesc>46 carte de visites, 2 tintypes: b&w; 2.5 x 4 in.
	          and smaller.</physdesc>
	    </did>
	    <scopecontent> Images include Neill family members, as well as
	      family friends and relatives. </scopecontent>
	    <daogrp>
	      <daodesc> Selected digital images </daodesc>
	      <daoloc role="reference"
	        href="http://collections.mnhs.org/visualresources/Results.
	        cfm?Page=1&Location=P2668%2A&"/>
	      <daoloc role="thumbnail" title="Edward D. Neill, Jr., ca. 1861"
	        altrender="left"
	        href=" p2668/ images/pt131103_thumb.jpg"/>
	    </daogrp>

Web Display	

EAD Example:
 	
PDF version of a single item contained within a larger file set.
 	
\<daogrp\>
  \<daodesc\>
  \<daoloc\>
  \<daoloc\>
	\<c04\>
	   \<did\>
	      \<physloc\>153.L.16.8F\</physloc\>
	      \<unittitle\>Review of Vice Presidency, \</unittitle\>
	      \<unitdate\>1976-1979. \</unitdate\>
	      \<physdesc\>2 folders. \</physdesc\>
	   \</did\>
	   \<daogrp\>
	      \<daodesc\>\<p\>Digital version of Memorandum to President Carter
	         from Walter Mondale. \</p\>\</daodesc\>
	      \<daoloc role="reference"
	         href="00697/pdfa/00697-00034-1.pdf"/\>
	      \<daoloc altrender="left" role="thumbnail"
	         href=" 00697/ images/ 00034-1_thumb.jpg" title="Mondale
	         to Carter re: The Role of the Vice President in the Carter
	         Administration, December 9, 1976"/\>
	   \</daogrp\>
	\</c04\>

Web Display	Location 153.L.16.8F Review of Vice Presidency, 1976-1979. 2 folders. Digital version of Memorandum to President Carter from Walter Mondale.

Digital Archival Object Filenames

Filenames for a digital archival object are typically composed of three parts, plus a file extension. Each part is separated by a dash (hyphen), with the exception of the file extension, which is always preceded by a period.

00697-00034-2.pdf

Finding Aid ID Number → Digital Object Number → Part Number → File Extension
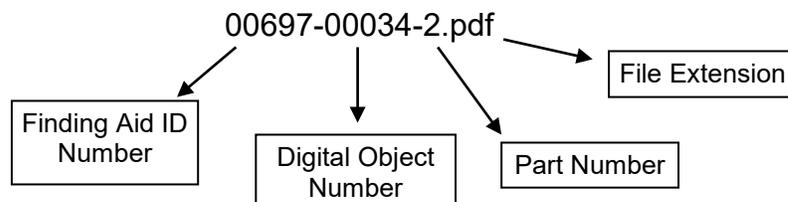
Finding Aid ID Number (*required*): The first portion of the digital archival object filename is exactly the same as the filename for the finding aid.

Digital Object Number (*required*): The second part of the filename is the number of the digital archival object. All digital archival objects within a single collection are

numbered in sequential order using a five-digit serial number beginning with *00001*. Object numbers are not necessarily assigned in the same order as the original papers are physically stored.

Part Number (*required when applicable*): Part numbers are added to a filename when a component consists of multiple containers (multiple folders, reels, etc.) Each part is numbered in sequential order beginning with 1 to indicate its relation to other parts of the same digital object.

Legacy Practice note: Prior to 2012, some digital reproductions in PDF formats were limited to a file size of 5000 or 10000 KB. Reproductions larger than this were broken into multiple parts and part numbers were included in filenames.

Thumbnail Images and Filenames

For the detailed description, thumbnail images should be sized between 90 and 150 pixels along the longest dimension. Care should be taken not to exceed these dimensions as text flow can be shortened by the display of a thumbnail.

Filenames for thumbnail images are the same as their companion digital object, but are appended by the "thumb" size of the file. The thumb size is separated from the object filename by an underscore, and the file extension follows.

For example, the thumbnail image corresponding to a full digital object that was named: *00697-00034-2* would be *00697-00034-2_thumb.jpg*.

For thumbnails of 150 pixels or smaller, append the word "thumb" to the object filename.

Example: *00697-00034-2_thumb.jpg*

For thumbnails larger than 150 pixels, append the horizontal and vertical dimensions to the object filename.

Example: *01042-00004_200x154.jpg*

Folder Paths and Filenames for Acquired Digital Objects

Folder paths and filenames for materials that were acquired in digital format and are stored on the preservation server are retained so that there is a mirrored pairing

between the master copies stored on the preservation server and the access copies made available in a finding aid folder.

For examples, see the inventories and folder directories for:

Minnesota. Board of Timber Commissioners. Reports of estimates and appraisals: http://www.mnhs.org/library/findaids/gr00664.xml

Minnesota Campaign for Change. Obama 2008 records: http://www.mnhs.org/library/findaids/01119.xml

Filenames for digital reproductions that were created in the acquisitions stage **and** that are stored on the preservation server are retained so that there is a mirrored pairing between the master copies stored on the preservation server and the access copies made available in a finding aid folder. Depending upon the number of digital objects, the variety of file formats, and the addition of thumbnail images, finding aid subfolders may be created to separately store audio, image, pdf, and video files.

URL Paths

There are two types of URL path statements: relative paths and absolute paths.

Relative paths are used for links to resources that are stored in the same directory as the xml inventory. Relative paths should be used for all images that are to be displayed in an inventory.

> *Example*: 00697/images/00697-00102-5.jpg

Absolute paths are used for links to resources that are not stored in the same directory as the xml inventory.

> *Example*: http://www.mnhs.org/collections/upclose/Mondale-CarterMemo.pdf

URL Encoding: Unsafe or Reserved Characters

Typographical characters used to encode a url should consist of alphabetical or numerical characters. However, sometimes a filename or pathway can include characters that are reserved for special purposes. Reserved characters include the pound sign or hash tag (#), the at sign (@), the question mark (?), and many

others. Because reserved characters are often used for distinct purposes, they are considered unsafe and can not be used in a url.

When encoding a url for a filename or pathway that includes any reserved characters, substitute the reserved character with the hexadecimal code prefixed with a percent sign as shown in the chart below:

Reserved character	[space]	!	"	#	$	&	'	(	)	*	+
Hexadecimal character	%20	%21	%22	%23	%24	%26	%27	%28	%29	%2A	%2B

Reserved character	,	/	:	;	=	?	@	[	]
Hexadecimal character	%2C	%2F	%3A	%3B	%3D	%3F	%40	%5B	%5D

For an easy to use, accurate character conversion tool, use the url encoder available at: http://meyerweb.com/eric/tools/dencoder/

For additional information about url encoding, see http://en.wikipedia.org/wiki/Percent-encoding

For more information regarding the syntax and semantics governing urls, see the standards at: http://www.ietf.org/rfc/rfc1738.txt

FILE STORAGE

Department Network - Drafts in Progress

Draft finding aids that are in progress are stored on the Collections Management department network in a *Drafts* folder of the *FindingAids* directory. Images, PDF, or PDF/A files that are linked to finding aids are stored within format-specific subfolders within a folder bearing the name of the associated finding aid. This file structure is identical to the file structure on the Web server.
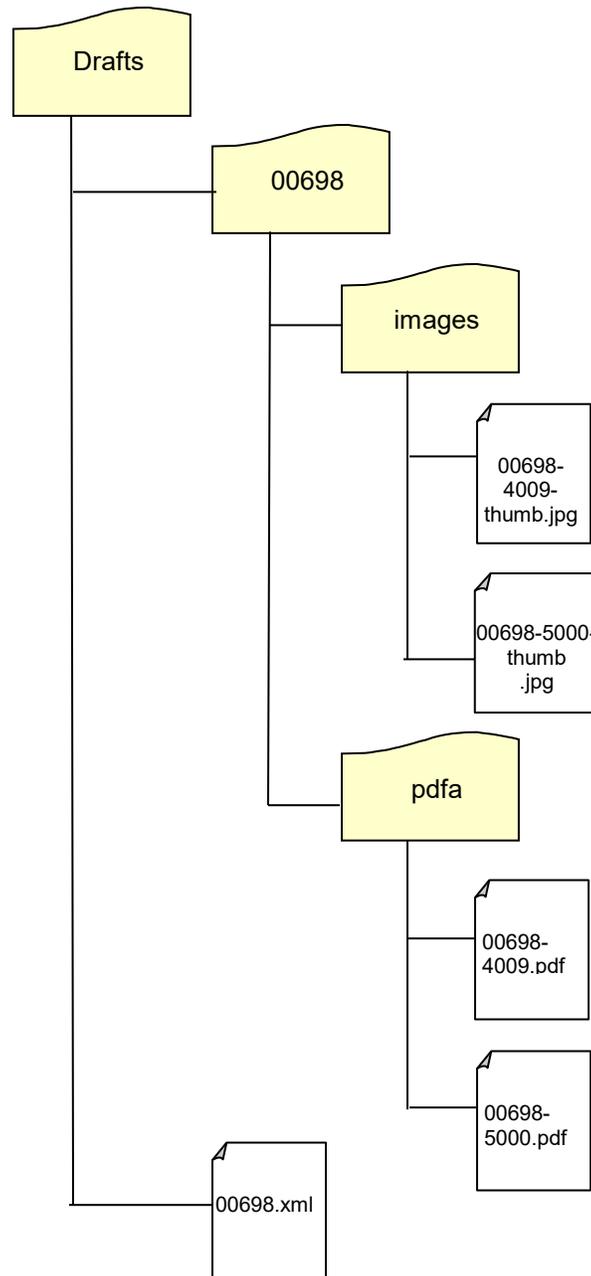
Department Network - Completed Versions

For easier file management, completed versions of finding aids are stored in folders for each holding area on the Collections Management network. Specific files are stored by file format within each holding area.

```
                    \\sunfish\departments\Collections
                    Management\FindingAids

        GOV                     MSS                     SV

        HTML                    HTML                    HTML

        PDF                     PDF                     PDF

        Word                    Word                    Word

        XML                     XML                     XML

            cons048                 00698                   sv00041

            cons048.xml             00698.xml               sv00041.xml
```
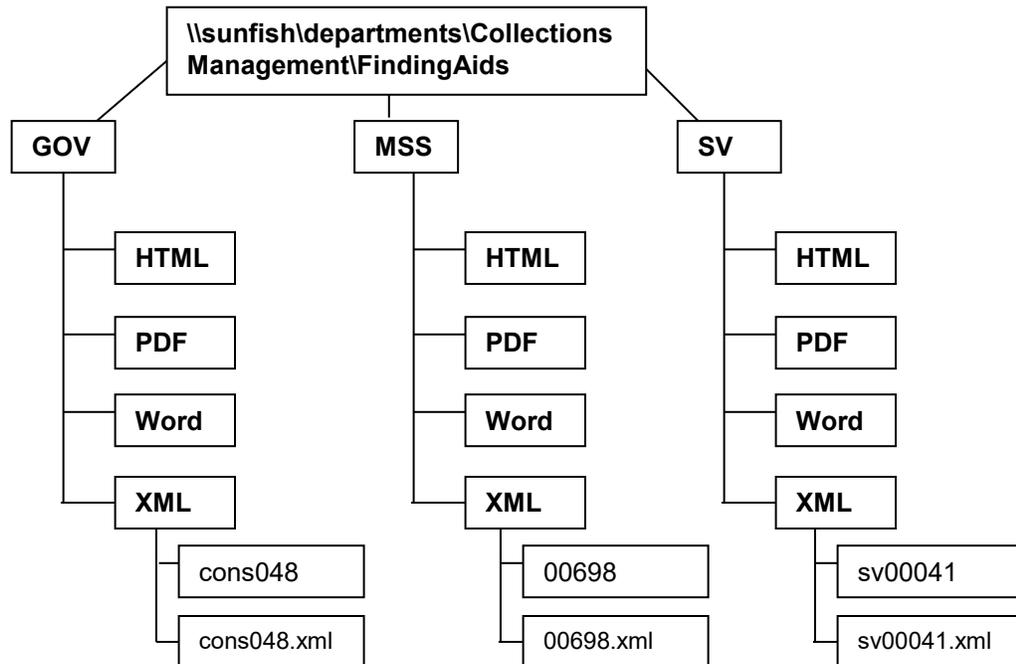
Web Server

Finding aids files loaded on the Web server are stored in one flat directory with subfolders for linked content. This file structure is identical to the structure of the department's FindingAids/Drafts folder.

```
        www.mnhs.org/library/findaids
        (includes all  html, pdf, and xml files)

                        00698

                                    images

                                    pdfa

                00698.xml
```