



Virginia Heritage Project

Best-Practice Guidelines for Encoded Archival Description

By Nancy Hadley

With the Work Group to Draft Consortial Guidelines for Encoding New Finding Aids, Virginia Heritage Project, VIVA

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Based on *Encoded Archival Description Retrospective Conversion Guidelines* by Daniel V. Pitti; as adapted for the Virginia Heritage Project by Edward Gaynor and Jodi Koste

Introduction

A. About the Virginia Heritage Project Best-Practice Guidelines

The **Virginia Heritage Project Best-Practice Guidelines for Encoded Archival Description Version (VHP/BPG)** are intended to represent an “acceptable range of uniform practice” in the application of Encoded Archival Description (EAD) version 1.0 to finding aids from disparate institutions for contribution to a union database. Like its predecessor, the **Encoded Archival Description Retrospective Conversion Guidelines**, the **VHP/BPG** drew on the consensus of several consortia: the Online Archive of California, the Virtual Library of Virginia's Virginia Heritage, the Online Archive of New Mexico, and the North Carolina Encoded Archival Description Project. Each consortium has as its objective the development of a union database of finding aids contributed by participating repositories.

The **VHP/BPG** supplements the **EAD Tag Library** and the **EAD Application Guidelines**, both published by the Society of American Archivists. As a supplement to the Tag Library and Application Guidelines, the **VHP/BPG** is intended to be a compatible subset of them. Discrepancies due to the technical idiosyncracies of the Virginia Heritage Project have been carefully noted in the guidelines. Any other discrepancies in guidance should be reported to Edward Gaynor, at the University of Virginia, who is maintaining this version of the guidelines.

The **VHP/BPG** is intended to be used by Virginia Heritage Project participants who are encoding new finding aids for inclusion in the Virginia Heritage Project database. VHP participants should be familiar with the principles and structure of EAD as set forth in the **EAD Application Guidelines** and the **EAD Tag Library** before using the **VHP/BPG**. At present, most VHP participants are using the MU form, designed at the University of Virginia and available at the VHP web site, to enter everything up to the <dsc>. Its use is documented in the **VIVA EAD Procedures** guide. The MU form allows participants to enter data and encodes it automatically. When using the **VHP/BPG** with the MU form, ignore coding for any element built into the form, but, for optional elements that the form does not automatically include, participants should enter coding along with data.

The **VHP/BPG** was prepared by the Virginia Heritage Project's Work Group to Draft Consortial Guidelines for Encoding New Finding Aids. Members of the Work Group were Susan A. Riggs, chair (College of William and Mary); Jay Gaidmore (Library of Virginia); Jennifer Gunter (Virginia Polytechnic Institute and State University); Nancy Hadley (College of William and Mary); and Ann Southwell (University of Virginia). Further assistance was provided by Edward Gaynor (University of Virginia) and Victoria L. Yoder (College of William and Mary). The Work Group reviewed the **EAD/RCG** in the light of Virginia Heritage Project participants' experience over the previous year and a half, and agreed on revisions to VHP requirements and on areas where additional explanation was needed. Nancy Hadley rewrote the guide, in consultation with the work group. The final draft was reviewed by the Executive Committee of the Virginia Heritage Project, and then opened for comment by all VHP participants.

B. Standards in consortial projects (by Daniel V. Pitti, Project Director, Institute for Advanced Technology in the Humanities, University of Virginia)

EAD is based on Standard Generalized Markup Language (ISO 8879) and EXtensible Markup Language (W3C), and is in the form of a Document Type Definition (DTD). SGML and XML permit a great deal of flexibility in the representation of information. In order to design a machine-readable representation archival description based on SGML and XML that would meet the needs of the archives and library communities, the developers of EAD first developed design principles for the DTD and related supporting documents.

One principle found in the Accords recognized that an encoding standard would have to accommodate both a great diversity of existing finding aids, and future finding aids based on more rigorous content standards. Because the DTD must accommodate a diverse past, it has to be flexible in allowing many different possible types, sequences, and quantities of descriptive information. At the same time, in anticipation of the need for a more standardized future in a shared information environment, the DTD mildly constrains the most important information in finding aids, namely that information needed to locate, retrieve, and identify an archival unit, and to make a reasonable evaluation of its relevance to an interest or need.

Given the flexibility of EAD it does not in and of itself ensure that machine-readable finding aids will be easily communicated between repositories, nor facilitate the building of union database. Finding aids in union databases will need to share a degree of uniformity, both to make them easily intelligible for users as they navigate from a finding aid from one institution to that of another, and to make them manageable in a computer environment. This uniformity applies to both the intellectual content, and the machine-readable representation or encoding of that content. Predictability and stability are essential for the existence of communities.

These guidelines attempt to provide predictability and stability through an “acceptable range of uniform practice” that is both specific to the needs of Virginia Heritage Project participants and in accord with the practices of the broader EAD community.

C. How to read the templates

The column at the left of each template indicates whether an element is required (R), required if available (RA), or not required (NR). The discussion of certain tags will note which elements are strongly recommended, though not required. Although there is nothing in the lefthand column for closing tags, remember that every tag used must have a matching closing tag.

Everything in this typeface (Verdana 12) is the required language and punctuation for this section of the template. *Smaller, italicized type indicates a portion of text to be written by the encoder.* Sometimes there is a choice of language. In that case, alternatives will be in smaller type, enclosed in square brackets, separated by the word OR in capital

letters, for example: [Choice 1 in standardized language] OR [Choice 2 in standardized language] OR [*Choice 3 in language determined by the encoder*]. Select the choice you prefer, and do not encode the square brackets or the word OR, of course.

Discussion of each portion of the template is in this typeface (Times New Roman 12), and indented from the template itself.

Examples are in still another typeface (Arial Narrow 12) and indented further yet.

CHAPTER I

I. EAD Header <eadheader>

A. Overview

The EAD Header <eadheader>, or metadata, describes the finding aid and the EAD file itself. It includes information about how the finding aid was created, encoded, and published online. Many of the elements of the <eadheader> will be the same for every finding aid from a single repository. The <eadheader> is not displayed to the public.

The <eadheader> is Section 0 in the Virginia Heritage Project’s MU form.

B. Template with discussion

R	<p><eadheader audience="internal" langencoding="ISO 639-2" findaidstatus="unverified-full-draft"></p> <p>AUDIENCE value is “internal” and is required. The <eadheader> is intended for access and control of the EAD instance by repository staff. It is not intended for display and use by public users of the finding aid.</p> <p>LANGENCODING value is “ISO 639-2” and is required. Language encoding in the EAD instance will subscribe to the three letter bibliographic ISO 639-2 language codes. A language code is entered for the language of the material in the LANGMATERIAL attribute on <archdesc> and <c>s. See <archdesc> for details concerning appropriate usage of the code.</p> <p>FINDAIDSTATUS specifies the editorial status of the finding aid. Four values are possible:</p> <ul style="list-style-type: none"> • “unverified-partial-draft” • “unverified-full-draft” • “edited-partial-draft” • “edited-full-draft.” <p>The adjectives “partial” and “full” distinguish between finding aids that describe only part of an archival unit and those that describe the entire archival unit. For example, if only three of four series in a manuscript collection are analyzed and described, the finding aid would be either an “unverified-partial-draft” or an “edited-partial-draft”.</p> <p>The adjectives “unverified” and “edited” refer to editorial review of the finding aid for accuracy and completeness within the repository. Finding aids that are initially converted and contributed to the union database are either “unverified-partial-draft” or “unverified-full-draft”. After editorial review by the contributing repository, the status is changed to “edited-partial-draft” or “edited-full-draft” by the editor, and resubmitted for publication in the union database.</p> <p>In the Virginia Heritage Project, guides that are sent from participating</p>
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	institutions for markup at UVa will be tagged “edited.” Each participating institution will determine whether the guides are “partial” or “full.”
R	<p><code><eadid type="SGML catalog">PUBLIC "-//Name of owner::subordinate named division of owner::additional subordinate division if needed//TEXT (US::National repository code::VHPid::Title of archival unit)//EN" "VHPid.xml"</eadid></code></p> <p>TYPE value is always “SGML catalog” and is required.</p> <p>The text of the <code><eadid></code> is formulated in accordance with the SGML specification for Formal Public Identifiers and International Standard Archival Description (General) (ISAD(G)). Most of it is automatically filled in by the Virginia Heritage Project MU form.</p> <p>The VHP institutional code and the sequential number assigned to this particular EAD document in the tracking database should be filled in the two places where VHPid appears in <code><eadid></code>. In the second occurrence, it should be within double quotes and have .xml appended. This is the name of the file submitted to the consortium FTP site.</p> <p>Title of archival unit is the same as <code><titleproper></code> discussed below, except that inclusion of the <code><date></code> element is not necessary. However, institutions may include the date if desired, especially in cases where the date distinguishes separate collections from the same records creator.</p> <p>Example: <code><eadid type="SGML catalog">PUBLIC"-//Virginia Commonwealth University::James Branch Cabell Library::Special Collections and Archives//TEXT (US::ViRCU::vircu00065::A Guide to the James Branch Cabell Papers)//EN" "vircu00065.xml"</eadid></code></p>
R	<code><filedesc></code>
R	<code><titlestmt></code>
R RA	<p><code><titleproper></code> [Register of the] OR [Inventory of the] OR [A Guide to the] <i>title of collection,</i> <code><date></code> <i>collection dates</i> <code></date></code> <code></titleproper></code></p> <p>The <code><titleproper></code> is the title of the finding aid, not the archival unit described in it. The <code><titleproper></code> of the finding aid must be distinguished from the <code><unittitle></code> of the finding aid by the addition of a prefatory phrase such as: “Inventory of the ...” or “Register of the ...” or “A Guide to the ...”</p> <p>Virginia Heritage Project participants must select one of these three phrases. Follow it with the title of the collection or other materials being described, and a comma and a space before the <code><date></code> tag.</p> <p>The collection dates are inclusive.</p>

<p>R</p> <p>R</p>	<p><code><subtitle id="sort"></code><i>[last name, first name,]</i> OR <i>[name of family or organization,]</i> <i>[Papers,]</i> OR <i>[Records,]</i> <i>collection dates</i></p> <p><code><num type="collectionnumber"></code><i>collection or accession number</i><code></num></code><code></subtitle></code></p> <p>The use of these elements is specific to the Virginia Heritage Project. The <code><subtitle></code> is used by the VHP search engine to display the results of searches and browsing. Its purpose is to provide a form of collection name that sorts alphabetically. Change the word order and/or eliminate words from the title of the collection so that the key words come first. The collection dates and the collection number are also included for display purposes. Note that since these elements are a “workaround” for the VHP search engine and display, rather than a standard feature of all EAD guides, individual institutions have great flexibility in deciding how to enter the collection names.</p> <p>Example:</p> <p><code><titleproper></code>A Guide to the Papers of Jane Doe, <code><date></code>1926-1959<code></date></code><code></titleproper></code> <code><subtitle id="sort"></code>Doe, Jane, Papers, 1926-1959<code><num type="collectionnumber"></code>Ms. 1963.043<code></num></code><code></subtitle></code></p> <p>Example:</p> <p><code><titleproper></code>Inventory of the Peter Smith Collection of Advertising Memorabilia, <code><date></code>1870-1909<code></date></code><code></titleproper></code> <code><subtitle id="sort"></code>Smith, Peter, Advertising Memorabilia Collection, 1870-1909<code><num type="collectionnumber"></code>10032Ad<code></num></code><code></subtitle></code></p> <p>Example:</p> <p><code><titleproper></code>A Guide to the Papers of the Samuel Sorrell Chapter, Sons of the American Revolution, <code><date></code>1965-1983<code></date></code><code></titleproper></code> <code><subtitle id="sort"></code>Sons of the American Revolution, Samuel Sorrell Chapter, Papers, 1965-1983<code><num type="collectionnumber"></code>S54.1984<code></num></code><code></subtitle></code></p>
<p>RA</p>	<p><code><author></code>Processed by <i>staff/name</i> in <code><date></code><i>date.</i><code></date></code><code></author></code></p> <p><code><author></code> is required if available. The content of the <code><author></code> element in <code><titlestmt></code> should be the name of the individual responsible for the intellectual content of the finding aid. Many repositories have traditionally included this information on the title page of their paper-based finding aids. If the individual name is not known, or if institutional practice is not to use individual names, use a generic phrase:</p> <p>Example:</p> <p><code><author></code>Processed by Special Collections staff in <code><date></code>July 1975.<code></date></code><code></author></code></p> <p>The name of the individual responsible for the EAD encoding does not go here, but within the <code><creation></code> note discussed later in this chapter. If the person or staff responsible for creation of the intellectual content of the finding aid and the</p>

	<p>encoding are one and the same, which frequently may be the case with finding aids originally encoded using EAD markup, then encode the name within the <author> element and again within the <creation> element.</p> <p><date> is required if available. The precise date, if known, should be given. If the date can be estimated from what is known without further research, then give the date in the form <date>ca 19__.</date>, supplying the decade, and if possible, year. If the date is not known, it may still be possible to make some useful statement about the date, such as <date>prior to 1962.</date>. If the date is not known and cannot be estimated easily, then enter <date>date unknown.</date>.</p>
	</titlestmt>
R	<p><publicationstmt></p> <p>The <publicationstmt> tells researchers who published the EAD finding aid and holds copyright to it. The name and complete address of the repository are required in the <publicationstmt>. A complete address for the Virginia Heritage Project includes the following: postal address, phone and fax numbers, email address, and URL for the repository homepage. However, if the repository prefers that researchers not use fax or email to contact the repository, either or both of those lines may be omitted.</p> <p>It is highly recommended that the name and address of the repository be stored as a separate referenced file that can be independently maintained. Virginia Heritage Project participants will send the name and complete address information for the repository once to UVa, where it is maintained in a separate file that is referenced in the repository’s MU form. The repository name/address file is declared in an ENTITY statement at the beginning of the EAD file. This replaces the <publisher>, <address>, and <addressline> tags that would be used if the information were encoded directly into the finding aid.</p>
R	<p><date>&copy;;copyright date</date> <p>Copyright holder. All rights reserved.</p></p> <p>This section of the <publicationstmt> tells who holds copyright to the EAD finding aid. “&copy;” is the ISO character entity that is the equivalent of the symbol ©. The copyright date is the year the finding aid was placed online for the public. The copyright holder is usually defined by the repository’s parent institution, and will probably be the same for each guide in a single repository.</p> <p>A link to the Virginia Heritage Project’s “Conditions of Use” is also displayed in this section. It is automatically inserted into <publicationstmt> in the MU form as an externally referenced file.</p>
RA	<p><p id=“filesize”>ca. <i>file size</i> Kilobytes</p></p> <p>The file size refers to a computerized finding aid prior to EAD tagging. Approximate if necessary. This element is not required if the computerized version of the finding aid is created and tagged as a single operation.</p>

	<p></publicationstmt> </filedesc></p>
R	<p><profiledesc></p>
R	<p><creation>Machine-readable finding aid derived from [paper by means of scanning and OCR; OCR file edited for typographical errors before encoding.] OR [word processing program, version number if known.] OR [typescript by rekeying.] OR [database name database, version number if known, by means of machine processing.] [Machine-readable finding aid created by <i>staff/name</i>, <date><i>date</i></date>.] OR [Text converted and initial EAD tagging provided by <i>vendor name</i>, <date><i>date received from vendor</i></date>.]</creation></p> <p>The <profiledesc><creation> element provides the information concerning the format of the original and how it was encoded. For Virginia Heritage Project participants, a choice of standardized language is provided above. The first sentence specifies format of original and method(s) of conversion. The second sentence names the individual or vendor responsible for the conversion, with the date of conversion.</p> <p>Examples:</p> <p><creation>Machine-readable finding aid derived from Microsoft Word 97. Machine-readable finding aid created by Jane Smith, <date>October 2001.</date></creation></p> <p><creation>Machine-readable finding aid derived from paper by means of scanning and OCR; OCR file edited for typographical errors before encoding. Text converted and initial EAD tagging provided by Acme Data Service, <date>June 12, 2001.</date></creation></p>
R	<p><language>Description is in <language>English.</language> </language></p> <p><language> is the language of the description, not the language of the material.</p>
	<p></profiledesc></p>
R	<p><revisiondesc> <change> <date><i>date of initial publication of this guide in the Virginia Heritage Project</i></date> <item>no changes</item> </change></p> <p>The Virginia Heritage Project has made <revisiondesc> a required field for technical reasons. It must have placeholder values even though it is rarely used. It should initially contain the year of the publication of the guide in the <date> element, and the words “no changes” in the <item> element.</p>

NR	<p><change> <date><i>date of significant change to this guide</i></date> <item><i>brief textual description of significant change, name of editor</i></item> </change></p> <p>After the initial cycle of creation and editorial review, <revisiondesc> is used for significant changes to the content of the description. If a significant change is made to the guide, add another set of <change> <date> <item> elements as shown here. An example of significant change might be revision of the finding aid to include the donation of 60 additional linear feet of materials to the collection. Minor changes to correct encoding and typographical errors are not significant changes. Judgements concerning what constitutes a “significant change” are the responsibility of individual archives.</p>
	</revisiondesc>
	</eadheader>

CHAPTER II

II. Front Matter <frontmatter>

A. Overview

Front Matter <frontmatter> generates the electronic title page for the finding aid. This section identifies the finding aid for the user by providing information about the title of the finding aid, the author and processors, the name of the institution, and the date and place of publication. It is required in the Virginia Heritage Project, and standardizing its elements ensures consistency throughout the Project. Like the <eadheader>, many of the elements of <frontmatter> will be the same for every finding aid within a repository.

The <frontmatter> is Section 1 in the Virginia Heritage Project’s MU form.

B. Template with discussion

R	<frontmatter>
R	<titlepage>
R	<p><titleproper> [Register of the] OR [Inventory of the] OR [A Guide to the] <i>title of collection</i>, <date><i>collection dates</i></date> </titleproper></p> <p>The <titleproper> should match exactly the <titleproper> given in the <eadheader>. Remember that the <titleproper> is the title of the finding aid, not the archival unit described in it.</p>
R	<p><subtitle>A Collection in[the]<lb/><i>name of repository department</i></p> <p>The <subtitle> displays with the title and the collection number at the top of the title page for each inventory in the Virginia Heritage Project. In the <subtitle>, use the correct name for the administrative unit to which the materials belong. Place the line break <lb/> immediately before the name, adjusting “the” to be part of the name or on the line with “A Collection in” as appropriate for institutional usage.</p> <p>Example from the University of Virginia: <subtitle>A Collection in<lb/>The Special Collections Department <num type=“Accession Number”>10320-e</num> </subtitle></p> <p>Example from the College of William and Mary: <subtitle>A Collection in the<lb/>Manuscripts and Rare Books Department <num type=“Collection Number”>Mss. 39.1 J47</num> </subtitle></p> <p>Example from the Library of Virginia: <subtitle>A Collection in<lb/>The Library of Virginia <num type=“Accession Number”>21466</num></p>

	</subtitle>
RA	<p><num type="[Collection number] OR [Accession Number]">number</num></p> <p>The number is required unless an institution does not use any form of number to identify its collections. See examples above.</p>
	</subtitle>
R	<p><p id="logostmt"> <extptr actuate="auto" show="embed" entityref="logo"/> </p> <publisher>name of repository, name of parent institution </publisher> <date type="publication">year this guide is published on the web </date> &contact;</p> <p>This section of <frontmatter> gives the publisher and contact information for the title page of the online guide, with the institutional seal. Like the <publicationstmt> in Chapter I, the contact information is maintained at UVa in a separate file that is referenced in the repository's MU form. The repository name/address file is declared in an ENTITY statement at the beginning of the EAD file. This replaces the <list> and <item> tags that would be used if the information were encoded directly into the finding aid.</p> <p>The publisher might vary within an institution, if guides are produced by different departments within the repository, so the name of the publisher is encoded directly instead of being in the separately referenced file.</p> <p>Examples:</p> <pre><p id="logostmt"> <extptr actuate="auto" show="embed" entityref="logo"/> </p> <publisher>James Branch Cabell Library, Virginia Commonwealth University </publisher> <date type="publication">2002 </date> &contact;</pre> <pre><p id="logostmt"> <extptr actuate="auto" show="embed" entityref="logo"/> </p> <publisher>Special Collections Department, University of Virginia Library </publisher> <date type="publication">2001 </date> &contact;</pre>

NR	<pre> <list type="deflist"> <defitem> <label>Processed by: </label> <item>[<i>name of person or staff unit</i>, <date><i>year</i>.</date>] OR [<i>name of person or staff unit.</i>]</item> </defitem> <defitem> <label>Funding: </label> <item>[Web version of the finding aid funded in part by a grant from the National Endowment for the Humanities.] OR [<i>other funding statement</i>]</item> </defitem> </list> </pre> <p>This <list> element contains two possible statements that are placed on the title page: who processed the collection, and the funding source for the EAD version of the guide. Use the <list> element only if you encode one or both of the <defitem> subelements.</p> <p>The processor is not required, but is recommended. The processor may be a person, several people, or a unit. Generic phrases such as “Special Collections Staff” are useful, if the processor is not known or if the institution has a policy of not publicizing persons’ names. If the year is given, punctuate as shown in the first option. The processing date is not required, but is recommended.</p> <p>During the first two years of the Virginia Heritage Project, until the NEH grant ends in December 2002, the funding statement “Web version of the finding aid funded in part by a grant from the National Endowment for the Humanities” is required. After December 2002, a funding statement is optional. It may be used if an institution wishes to credit outside fund sources for preparation of a particular EAD guide.</p> <p>Example with processors named, before December 2002:</p> <pre> <list type="deflist"> <defitem> <label>Processed by: </label> <item>Sharon Defibaugh, Nina Aslan, and David Patch, <date>2000.</date> </item> </defitem> <defitem> <label>Funding: </label> <item>Web version of the finding aid funded in part by a grant from the National Endowment for the Humanities.</item> </defitem> </list> </pre>
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	<p>Example with generic processing statement, no funding:</p> <pre><list type="deflist"> <defitem> <label>Processed by: </label> <item>Special Collections staff, <date>1979.</date></item> </defitem> </list></pre> <p>Example with private funding statement:</p> <pre><list type="deflist"> <defitem> <label>Processed by: </label> <item>Jane Jennings, <date>2004.</date></item> </defitem> <defitem> <label>Funding: </label> <item>Web version of the finding aid funded in part by a gift of the Cabell Foundation. </item> </defitem> </list></pre>
	<pre></titlepage> </frontmatter></pre>

CHAPTER III

III. Archival Description <archdesc>

A. Overview

The Archival Description <archdesc> is the EAD section containing the actual collection description. All the elements of <archdesc> up to <dsc> are high-level description, referring to the collection as a whole. Most of these elements correspond to the fields in a MARC catalog record for archival materials.

The <archdesc>, except for the <dsc>, is Section 2 in the Virginia Heritage Project's MU form. (The <dsc> element, for describing subordinate components of the collection, is Section 3 in the Virginia Heritage Project's MU form. In these guidelines, <dsc> is discussed separately in Chapter III, Section J.)

The following elements are directly available in <archdesc>:

- | | |
|-----------------|---|
| <did> | Descriptive Identification
The high-level <did> in <archdesc> includes basic descriptive information identifying the collection, such as title, dates, creator, collection number, extent, abstract of collection, repository, and location at repository. Each lower-level component also has a <did>. |
| <admininfo> | Administrative Information
Information about restrictions and citation are required in this section. Information about the management of the collection, such as alternative formats, acquisition, and processing, may be included in this section. <admininfo> will no longer be used in EAD version 2002; instead, its subelements will fall directly under <archdesc>. |
| <bioghist> | Biography/History |
| <scopecontent> | Scope and Content |
| <arrangement> | Arrangement |
| <organization> | Organization
<organization> will be combined with <arrangement> in EAD 2002 |
| <add> | Adjunct Descriptive Data
May include indexes, bibliographies, and information about related materials in other collections. <add> will no longer be used in EAD version 2002; instead, its subelements will fall directly under <archdesc>. |
| <controlaccess> | Controlled Access |
| <dsc> | Description of Subordinate Components |

Did-level elements. Descriptive Identification <did> is required and must occur before any other elements. The other elements (<admininfo>, <bioghist>, <scopecontent>, <arrangement>, <organization>, <add>, and <controlaccess>) are collectively referred to as the “did-level elements.” In EAD, they technically can occur in any order and as many times as necessary. However, for consistency within the Virginia Heritage Project, all did-level elements should follow the order shown in the template.

Did-level elements represent distinct categories of archival description. Each contains subelements representing specific, logical components of the parent element's descriptive category. Guidance in use of the subelements specific to or primarily used in each did-level element will be given under each parent element below.

Head elements. <head> is a generic element that identifies a section of text and is required on all <admininfo>, <bioghist>, <controlaccess>, <scopecontent>, <arrangement>, <organization>, and <add> elements, and on all major subdivisions within each element. However, the <head> may be omitted within an <add> if each of its subcomponents contains its own <head>.

B. Archival Description <archdesc> template and discussion

R	<p><archdesc level="collection or other term" langmaterial="eng"></p> <p>The LEVEL attribute on <archdesc> is required by the DTD and thus must be set for the document to parse. Lack of this attribute will cause failure and error messages when parsing or publishing the file. Select one of the following available values:</p> <ul style="list-style-type: none"> • collection • file • fonds • item • recordgrp • subgrp • subseries • series <p>The LANGMATERIAL (language of the archival materials) values should be set using the standard three letter bibliographic codes. For collection materials in languages other than English, see ISO 639-2, Code for the representation of names of languages (at http://lcweb.loc.gov/standards/iso639-2/bibcodes.html). In EAD 2002, the attribute LANGMATERIAL will be replaced by the element <langmaterial> within the <did>.</p> <p>Examples:</p> <p><archdesc level="collection" langmaterial="eng"></p> <p><archdesc level="recordgrp" langmaterial="fre"></p>
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	<i>The <did>, the other did-level elements, and the <dsc> with all its component levels <c01>...<c12>, are all within <archdesc></i>
	<code></archdesc></code> <code></ead></code>

C. Descriptive Identification <did> template and discussion

The <did> provides the user with concise information describing the collection in its entirety. The <did> elements should be in the order shown in the template (<head>, <unittitle> and <unitdate>, <unitid>, <origination>, <physdesc>, <physloc>, and <abstract>). Use the recommended LABEL attribute value as shown. Some elements have several choices of LABEL attribute value to select from, shown in square brackets.

R	<code><did></code> <code><head>Descriptive Summary</head></code>
R	<code><unittitle label="Title">Title of collection,</code> This is the title of the collection itself, not the title of the guide, so do not include the phrases “A Guide to the”, “Inventory of the”, or “Register of the”. For best display in the Virginia Heritage Project, place a comma and space after the title to separate it from the <unitdate>.
R	<code><unitdate type="[bulk] OR [inclusive] OR [single]">collection dates</code> Choose the appropriate TYPE attribute value. <code></unitdate></code> <code></unittitle></code>
RA	<code><unitid label="Collection number">repository's collection number</unitid></code>
NR	<code><origination label="[Creator] OR [Creators] OR [Collector] OR [Provenance]">name of creators or collector</origination></code> <origination> is an optional element which specifies the individual, family, or organization responsible for the creation, accumulation, or assembly of the described materials before their incorporation into an archival repository. Examples: <code><origination label="Creator">Southern Aid Society of Virginia</origination></code> <code><origination label="Collector">Margaret Freeman Cabell</origination></code> <code><origination label="Creators">Brown Family, Alexander Brown, Mayo Cabell.</origination></code>

	<p>This element is comparable to MARC fields 100, 110, 700, and 710. Repositories desiring a close correspondence between their EAD and MARC records may choose to encode the names within <persname>, <famname>, or <corpname> tags and use the ENCODINGANALOG attribute, as shown in the examples below. Notice that for multiple creators, punctuation marks and spaces must be included in the encoding since the <origination> element displays inline.</p> <p>Examples with detailed tagging:</p> <pre><origination label="Creator"><corpname encodinganalog="110">Southern Aid Society of Virginia</corpname></origination></pre> <pre><origination label="Collector"><persname encodinganalog="100">Margaret Freeman Cabell</persname></origination></pre> <pre><origination label="Creators"> <famname encodinganalog="700">Brown Family, </famname> <persname encodinganalog="100">Alexander Brown, </persname> <persname encodinganalog="700">Mayo Cabell.</persname> </origination></pre>
R	<p><physdesc label="[Extent] OR [Size] OR [Physical Characteristics] OR [Physical Description]"><i>physical description of collection in linear or cubic feet, number of boxes or other containers, number and type of items, etc.</i></physdesc></p> <p>This element is comparable to MARC fields 300 and 533.</p> <p>Examples:</p> <pre><physdesc label="Size">63 boxes.</physdesc></pre> <pre><physdesc label="Physical Characteristics">42 audio tapes with transcripts</physdesc></pre> <pre><physdesc label="Extent">10 linear feet and 500 volume library</physdesc></pre>
NR	<p><physloc label="[Location] OR [Shelf Location] OR [Storage Location]"><i>location</i></physloc></p> <p>Use <physloc> to describe the physical location of the materials within the repository or within a storage facility. Examples include shelf locations, locked vaults or specific or generic text which describes locations in external storage facilities.</p> <p>Examples:</p> <pre><physloc label="Storage Location">Off-site. Retrieval must be requested 2 days in advance.</physloc></pre> <pre><physloc label="Location">Housed in Virginia Authors Room.</physloc></pre>

	<p><physloc label="Shelf Location">Box 14 is shelved in Oversize section.</physloc></p> <p><physloc label="Location">Posters are filed in map case 5.</physloc></p>
NR	<p><abstract label="Abstract"><i>abstract of collection</i></abstract></p> <p>The purpose of the abstract is to help users immediately determine the relevance of the collection for their research. The abstract should be extremely brief. It may not contain more than one paragraph. More detailed descriptions will be in the <bioghist> and <scopecontent> elements. The abstract may summarize both biographical and content information.</p> <p>Many repositories place the abstract in MARC field 520 \$a. They then place the full scope and content note in MARC field 520 \$b, and the full biographical or historical note in MARC field 545 \$b.</p>
	</did>

D. Administrative Information <admininfo> template and discussion

<admininfo> is for background information that users may need to gain access to the archival materials, place them in context, and make use of the information they contain. **<admininfo> will no longer be used in EAD version 2002; instead, its subelements will be directly available under <archdesc>. It will be possible to bundle some or all of these using the new element <descgrp> if desired.**

For the Virginia Heritage Project, each institution must follow the order of the subelements as given in the template below. The first three elements, <accessrestrict>, <userrestrict>, and <prefercite>, are required, even if the content of <accessrestrict> and <userrestrict> is the same for all finding aids from a given repository. The remaining six elements are optional.

The <head> is required for each element used.

In EAD, <admininfo> is also designed to assist repositories in some aspects of collection management. However, specific instructions for encoding staff-only collection management information are not given in these guidelines because public use, rather than collection management, is the primary purpose of consortial projects such as the Virginia Heritage Project.

R	<p><admininfo></p> <p><head>Administrative Information</head></p>
R	<p><accessrestrict></p> <p><head>Access</head></p>

	<p><p>Collection is [open to research.] OR [closed to research until <date>date </date>.] OR [<i>statement about which portions of the collection are open and which are closed.</i>]</p> </accessrestrict></p> <p><accessrestrict> contains information about conditions under which the materials described in the finding aid are available to be viewed by researchers. It can also be used to state the absence of any access restrictions.</p> <p>This element is comparable to MARC field 506.</p>
R	<p><userrestrict> <head>Publication Rights</head> <p>Statement about copyright or other restrictions on the publication or exhibit of material from the collection.</p> </userrestrict></p> <p>After a researcher has seen the archival materials, there may be restrictions on reuse of the information for purposes of quotation, publication, or other reproduction--these restrictions are put here.</p> <p>This element is comparable to MARC field 540.</p>
R	<p><prefercite> <head>Preferred Citation</head> <p>How to cite material from this collection, usually including collection name, collection number, and repository name.</p> </prefercite></p> <p>This element is comparable to MARC field 524.</p> <p>Examples:</p> <p><prefercite><head>Preferred Citation</head> <p>Box/folder, James Branch Cabell Papers, M 214, Special Collections and Archives, James Branch Cabell Library, Virginia Commonwealth University.</p></prefercite></p> <p><prefercite><head>Preferred Citation</head> <p>Cite as Francis P. Lee Papers, Manuscripts and Rare Books Department, Swem Library, College of William and Mary.</p></prefercite></p>
NR	<p><altformavail> <head>Alternative Form Available</head> <p>information about alternative forms</p> </altformavail></p> <p>Provides the researcher with information concerning the availability of these materials in other forms such as microfilm or videotape or published</p>

	<p>transcription.</p> <p>If only a portion of the material is available in alternate forms, then this tag can also be used at the component level, either in addition to, or instead of, using it here at the collection level. If a significant amount of material in the collection is available in the alternative form, then use <altformavail> both at the collection level and at the component level. For example, if Series 2 of a collection has been microfilmed, it would be helpful to the researcher to say so using <altformavail> at two places in the finding aid: with the collection-level description here, and in the component-level description of Series 2. For another example, a collection of oral history tapes might use <altformavail> at the item level to indicate which tapes have written transcriptions available, but also <altformavail> here at the collection level to tell researchers that many of the tapes have been transcribed. A contrasting example would be a folder of letters that have been reprinted in a journal article. In that case, it would probably be appropriate to put <altformavail> in the component-level folder description, but <i>not</i> to use <altformavail> at the collection level because the materials involved are such a small portion of the collection.</p> <p>This element is comparable to MARC field 530.</p>
<p>NR</p>	<pre><accruals> <head>Accruals</head> <p>note on accruals</p> </accruals></pre> <p>Marks anticipated additions, or conversely that no further additions are expected.</p> <p>Examples:</p> <pre><accruals> <head>Accruals</head> <p>The donor gave additional materials in 1950, 1951, 1967, and 1969 and continues to add to the collection when documents become available.</p> </accruals></pre> <pre><accruals> <head>Accruals</head> <p>Noncurrent additions to this Record Group are transferred from the Development Department annually at the end of the fiscal year in June.</p> </accruals></pre>
<p>NR</p>	<pre><acqinfo> <head>Acquisition Information</head> <p>source and type of acquisition</p> </acqinfo></pre> <p>Immediate source of the materials being described and the circumstances (donation, transfer, purchase, or deposit) under which they were received.</p>

	This element is comparable to MARC field 541.
NR	<pre><appraisal> <head>Appraisal Information</head> <p>archival appraisal decisions</p> </appraisal></pre> <p>Contains information regarding the process of determining the archival value and thus the disposition of records. It can be used to describe both original appraisal decisions and reappraisals that led to weeding or deaccessioning. (This element is not about the estimated monetary value of the collection.)</p>
NR	<pre><custodhist> <head>Custodial History</head> <p>discussion of custodial history</p> </custodhist></pre> <p><custodhist> encodes information about the previous chain of custody. Alternatively, such information is often included in the <bioghist> or <scopecontent> fields. The <custodhist> element provides a designated area for describing both the physical possession and intellectual ownership of the material and details of changes in ownership and/or custody that may be significant for its authority, integrity, and interpretation. Researchers also need to know whether a collection has previously been housed at a different repository in order to identify it correctly, since they may be using references in works published before the collection moved.</p>
NR	<pre><processinfo> <head>Processing Information</head> <p>useful information about processing actions</p> </processinfo></pre> <p>Many institutions using EAD include the name of the processor and the date the collection was processed in this field. Since the Virginia Heritage Project requires this information in the <author> element of <titlestmt>, however, it is redundant to repeat the information here.</p> <p>Information about processing actions that would help the researcher in understanding the collection can be noted in <processinfo>. For example, if a finding aid contains detailed description of several series of a large collection but only a rough inventory of the last two series, pending the completion of processing under a two-year NEH grant, it could be explained in this field. For electronic records, this field may be the most appropriate place to describe file conversions, media migrations, and other maintenance and preservation actions.</p>
	</admininfo>

E. Biography/History <bioghist> template and discussion

The <bioghist> element may contain a biographical narrative sketch of the individual(s) or family for personal papers, or a historical narrative sketch of the organization for records of a company, institution, or other corporate body. A chronology in list form may be placed in <bioghist>, instead of, or in addition to, the biographical/historical sketch.

<bioghist> is required if available. It is strongly recommended for good descriptive practice, except in the case of artificial collections. It provides the researcher with contextual information that aids in understanding the collection. If <bioghist> is used, the <head> is required.

This element is comparable to MARC field 545.

RA	<pre><bioghist> <head>Biographical/Historical Information</head></pre>
	<pre><p>biographical sketch or agency history</p> <p>additional paragraphs as desired</p></pre> <p><bioghist> may be lengthy and contain multiple paragraphs <p></p>.</p> <p>Example:</p> <pre><bioghist> <head>Biographical/Historical Information</head> <p>In early 1893, a handful of men in Richmond, Virginia organized the Southern Aid and Insurance Company in an effort both to furnish adequate and affordable insurance protection to African-Americans... </p> <p>After nearly a decade of slow growth and moderate profits, company leaders acted to reverse the stagnant business trends and modest cash influx... </p> <p>Despite its prominence as the first African-American insurance company, few have written about the Southern Aid Society of Virginia or its members after 1940. While some studies highlight the business's place in local Richmond history... </p> </bioghist></pre> <p>For family papers and for complex agency histories it may be desirable to subdivide <bioghist>, using emphasis <emph> and line breaks <lb/> to start each section with a bold-face subheading.</p> <p>Example of emphasized sections:</p> <pre><bioghist> <head>Biographical/Historical Information</head> <p>The Brown, Coalter, and Tucker families were connected through marriage, business, and social activities.</p> <p><emph render="bold">Brown Family</emph> <lb/>Henry Brown (1716-1766) was born in Bedford County... </p> <p>Capt. Henry Brown (1760-1841) was wounded in the Revolutionary War... </p> <p>Henry Peronneau Brown (1832-1894), married Frances Bland Coalter (1835-</pre>

	<p>1894) in 1858... </p> <p><emph render="bold">Coalter Family</emph> John Coalter (1769-1838) was born... </p> <p> ...more paragraphs... </p> </bioghist></p>
	<pre><chronlist> [<listhead> <head01>Date</head01> <head02>Event</head02> </listhead>] <chronitem><date>date</date><event>event</event></chronitem> <chronitem><date>date</date><event>event</event></chronitem> </chronlist></pre> <p>The <listhead> is optional, if you want the columns of dates and events to display with column headings saying “Date” and “Event.”</p> <p>If using both a biographical sketch and a chronology, enclose the whole <chronlist> inside <p> and </p> tags, as shown in the example below.</p> <p>Example of both a biographical sketch and a chronology:</p> <pre><bioghist> <head>Biographical/Historical Information</head> <p>Robert William Hughes was born at Muddy Creek Plantation... </p> <p> <chronlist> <chronitem><date>16 Jan. 1821 </date><event>Born at Muddy Creek Plantation, Powhatan Co., Va., the son of Jesse and Elizabeth Woodson (Morton) Hughes.</event></chronitem> <chronitem><date>Ca. 1837-1838 </date><event>Attended Caldwell Institute, Greensboro, N.C.</event></chronitem> <chronitem>... </chronitem> <chronitem><date>1901 </date><event>Died at Abingdon, Va.</event></chronitem> </chronlist> Source: <title render="italic">Dictionary of American Biography</title>; Preston-Johnston-Floyd-Hughes genealogical chart. </p> </bioghist></pre>
	<pre></bioghist></pre>

F. Scope and Content <scopecontent> template and discussion

This required field explains the content of the collection. <scopecontent> summarizes the range and topical coverage of the described materials, often mentioning their form and organization, and naming significant individuals, organizations, and subjects. Significant gaps in the materials are usually noted in <scopecontent> as well. <scopecontent> may be lengthy and contain multiple paragraphs.

The <head> is required for <scopecontent>.

This element is comparable to MARC field 520. If an abstract is used in the catalog record as well as a scope and content note, the abstract is placed in MARC field 520 \$a and the full scope and content note in MARC field 520 \$b.

R	<pre><scopecontent> <head>Scope and Content</head> <p>summary of what's in the collection</p> </scopecontent></pre>
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G. Arrangement <arrangement> and Organization <organization> templates and discussion

These two fields help the researcher to understand the order the materials are in, so that the researcher can readily locate the portions of the collection that are of interest.

<organization> will be combined with <arrangement> in EAD 2002.

NR	<pre><arrangement> <head>Arrangement</head> <p>what order the materials are in</p> </arrangement></pre> <p><arrangement> tells the filing sequence of the materials such as alphabetical, chronological, or numerical, and major deviations from that sequence such as “bound volumes filed at end”.</p> <p>If <arrangement> is used, the <head> is required.</p> <p>This element is comparable to MARC field 351 \$b.</p>
NR	<pre><organization> <head>Organization</head> <p>how the collection is subdivided</p> </organization></pre> <p><organization> summarizes the manner in which the materials have been subdivided into smaller units such as series and subseries. More detailed descriptions of what is in each smaller unit can be done in the <dsc> (see section J.2, Major Subdivisions).</p>

	<p>If <organization> is used, the <head> is required.</p> <p>This element is comparable to MARC field 351 \$a. It will be obsolete in EAD 2002.</p>
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H. Adjunct Descriptive Data <add>

Overview. The Adjunct Descriptive Data, <add>, describes additional information, tools, or sources that might help the researcher use the materials. In EAD version 1.0, the following descriptive subelements are available directly in <add>:

- <separatedmaterial> Separated Material
- <relatedmaterial> Related Material
- <otherfindaid> Other Finding Aid
- <bibliography> Bibliography
- <fileplan> File Plan
- <index> Index

In EAD version 2002, <add> will not be used. Instead, its subelements will be directly available in <archdesc> Some or all of them may be bundled using the new element <descgrp> if desired.

The following table shows where to encode information about different kinds of pertinent materials that have a direct relationship to the materials in this EAD record.

If you have...	Use...
A collection that once formed part of another collection which still exists (at your institution or another institution)	<separatedmaterial> (with <archref> if desired) to describe the parent collection
A collection from which some portion has been removed and made a separate collection	<separatedmaterial> (with <archref> if desired) to describe the collection that was split off
A collection from the same records creator as another collection in your institution, if the two collections were acquired separately and have been treated as two completely separate collections	<relatedmaterial> (with <archref> if desired) to describe the other collection
A collection from the same records creator as another collection, but the two collections were donated separately to different institutions	<relatedmaterial> (with <archref> if desired) to describe the other collection

Books or other items that were removed from the collection to be placed elsewhere in the library	<separatedmaterial> (with <bibref> if desired) to describe the books
Books that were owned by the same person who created the collection, but which were not donated to the library with the collection and were never considered part of the collection	<relatedmaterial> (with <bibref> if desired) to describe the books
Books written by the records creator	<bibliography> (with <bibref> if desired)
Books or articles based on materials from the collection	<bibliography> (with <bibref> if desired)
Published reprints of materials from the collection, with editorial comment and additional information that makes it an original work	<bibliography> (with <bibref> if desired)
Published reprints or reproductions of materials from the collection, without commentary	<altformavail> under <admininfo>, discussed in Chapter III, Section D.

Template and discussion

NR	<pre><add> <head>Additional Information</head></pre> <p>If more than one subelement is encoded, use “Additional Information” or a similar phrase for the <add> heading. However, if only one subelement is used, substitute its heading for “Additional Information” here, and do not use the heading under the subelement.</p> <p>Example with multiple subelements:</p> <pre><add> <head>Additional Information</head> <separatedmaterial> <head>Separated Material</head> <p>Smith & Jenkins account books have been removed from this collection and transferred to the Smith Family Papers.</p> </separatedmaterial> <relatedmaterial> <head>Related Material</head></pre>
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	<pre> <p>The Smith Family Papers contain...</p> </relatedmaterial> </add> Example with only one subelement: <add> <head>Separated Material</head> <separatedmaterial> <p>Copies of the college catalog for 1857, 1874, and 1882 were removed from this collection and shelved with the complete run of university catalogs.</p> </separatedmaterial> </add> </pre>
NR	<pre> <separatedmaterial> <head>Separated Material [at name of institution]</head> <p>Optional brief statement about the separated material.</p> </pre> <p>Use <separatedmaterial> to tell the researcher about collections or items that were once part of this collection. If the separated material is at another institution, optionally include that institution's name in the <head>.</p> <p><separatedmaterial> may be used without any <archref> or <bibref> subelements. (For an example of this simplified form, see the examples in <add> above.) Additional paragraphs may be included, enclosed between additional <p> and </p> elements.</p> <p>In order to display properly with the Virginia Heritage Project style sheet, the <p></p> tags after the head must be encoded even if they do not contain any text. A set of <p></p> tags, with or without text, must immediately precede </separatedmaterial>.</p>
NR	<pre> <archref> See <relatedmaterial> below for the template and discussion of <archref>. </archref> </pre>
NR	<pre> <bibref> See <bibliography> below for the template and discussion of <bibref>. </bibref> </pre>
	<pre> <p></p> </separatedmaterial> </pre> <p>For proper display with the Virginia Heritage Project, </separatedmaterial> must be immediately preceded by </p>. If you use <archref> or <bibref>, you must encode the empty <p></p> tags shown here just before </separatedmaterial>.</p>

NR	<p><code><relatedmaterial></code> <code><head>Related Material [at name of institution]</head></code> <code><p>optional brief statement introducing the related material</p></code> <code></relatedmaterial></code></p> <p>Use <code><relatedmaterial></code> to tell the researcher about other archival collections that are closely related in subject or creator to the materials described in this EAD record, as long as the other collections were never part of this one.</p> <p>If the related materials are at some other institution, it may be helpful to the researcher to include the other institution in the <code><head></code>. If there are related materials at more than one institution, the Virginia Heritage project recommends encoding a separate <code><relatedmaterial></code> section for each institution. More than one collection may be listed, in separate <code><archref></code> elements, under each <code><relatedmaterial></code> element (as shown in the <code><archref></code> example in the next section of the template).</p> <p><code><relatedmaterial></code> may also be used without any <code><archref></code> or <code><bibref></code> subelements. Additional paragraphs may be written, enclosed within additional <code><p></code> and <code></p></code> elements. This approach is shown in the example in this section of the template. The simplified approach does not allow as great a control over the display as the detailed approach.</p> <p>In order to display properly with the Virginia Heritage Project style sheet, the <code><p></p></code> tags after the head must be encoded even if they do not contain any text. A set of <code><p></p></code> tags, with or without text, must immediately precede <code></relatedmaterial></code>.</p> <p>This element is comparable to MARC field 544.</p> <p>Example of simplified <code><relatedmaterial></code> without <code><archref></code>:</p> <pre><relatedmaterial> <head>Related Material at the Library of Virginia</head> <p>Jerdone Family Papers, 1762-1866. Accession 21607, Personal papers collection, The Library of Virginia, Richmond, Virginia.</p> <p>Jerdone Family Slave Record Book, 1761-1865. Accession 20415, Personal papers collection, The Library of Virginia, Richmond, Virginia.</p> </relatedmaterial> <relatedmaterial> <head>Related Material at the College of William and Mary</head> <p>Jerdone Family Papers, 1753-1890. Collection number: Mss. 39.1 J47, Manuscripts and Rare Books Department, Swem Library, College of William and Mary.</p> </relatedmaterial></pre>
NR	<pre><archref> <origination>creator </origination> <unittitle>title, <unitdate type=" [inclusive] OR [single] OR</pre>

```
[bulk]">dates.
  </unitdate></unittitle>
  <unitid>collection number. </unitid>
  <repository>name of repository. </repository>
  <physdesc>extent. </physdesc>
  <abstract>brief statement about what is in the related collection.</abstract>
</archref>
```

Line breaks <lb/> may optionally be included within <archref> for detailed control of the display.

Example of detailed <relatedmaterial> with <archref>:

```
<relatedmaterial>
  <head>Related Material at the Library of Virginia</head>
  <archref>
    <unittitle>Jerdone Family Papers, <unitdate type="inclusive">1762-1866.
      </unitdate>
    </unittitle>
    <unitid>Accession 21607, Personal papers collection, </unitid>
    <repository>The Library of Virginia, Richmond, Virginia. </repository>
    <abstract>Correspondence of Francis Jerdone and his descendants.
    </abstract>
  </archref>
  <archref>
    <origination>
      <famname>Jerdone Family </famname>
    </origination>
    <unittitle> Slave Record Book, <unitdate type="inclusive">1761-1865.
      </unitdate>
    </unittitle>
    <physdesc>1 volume (113 pages).</physdesc>
    <unitid>Accession 20415, Personal papers collection</unitid>
    <repository>The Library of Virginia, Richmond, Virginia. </repository>
  </archref>
</relatedmaterial>
<relatedmaterial>
  <head>Related Material at the College of William and Mary</head>
  <archref>
    <unittitle>Jerdone Family Papers, <unitdate type="inclusive">1753-1890.
      </unitdate>
    </unittitle>
    <unitid>Collection number: Mss. 39.1 J47, </unitid>
    <repository>Manuscripts and Rare Books Department, Swem Library, College of
    William and Mary.</repository>
    <abstract>Includes letters, letterbooks, and account books of immigrant Francis
    Jerdone, merchant of Yorktown, Virginia; and Hanover County, Virginia. Most of the
```

	<p>collection consists of letters, accounts and diaries of the next two generations of members of the Jerdone family, including Francis Jerdone and his sons John, Francis and William Jerdone.</abstract> </archref> </relatedmaterial></p>
NR	<p><bibref> <relatedmaterial> may contain <bibref> as well as <archref>, though <bibref> is seldom used here. For the full template of <bibref>, see <bibliography> below. </bibref></p>
	<p><p></p> </relatedmaterial></p>
NR	<p><otherfindaid> <head>Other Finding Aid</head> <p>Description of additional or alternative guides to the collection.</p> </otherfindaid></p> <p>Other finding aids include such things as supplemental card files available in the reading room, lists generated by the records creator, or a finding aid made before a collection was rehoused. See the EAD Tag Library for further information.</p>
NR	<p><bibliography> <head>Bibliography</head></p> <p>This element is comparable to MARC fields 510 and 581.</p> <p>For a detailed bibliography, each reference is tagged with <bibref> and its subelements, as shown in the example in the next section of the template. The advantage of detailed tagging is its potential for allowing advanced searching by author, title, or publisher. It also allows finer control of the display.</p> <p><bibliography> may also be used in a simplified form, without any <bibref> subelements. Instead, each work in the bibliography is enclosed within <p> and </p> elements. This approach is shown in the example below.</p> <p>Example of simplified <bibliography> without <bibref>:</p> <pre><bibliography> <head>Bibliography</head> <p><title render="quoted">Letter Book of Francis Jerdone.</title> <title render="italic">William and Mary Quarterly,</title> 1st series, XIV. 1905- 1906: 141-145.</p> <p>Pilaro, Frances Maria. <title render="quoted">The Jerdone Family: Changing Family Relationships in the Early National Period.</title> Honors Thesis, Swem Library, College of William and Mary, 1988. Call number: LD6051 .W5m Hist. 1988 P54</p> </bibliography></pre>

NR	<pre> <bibref> <persname role="author">Last name, first name.</persname> <title render="quoted">title of article</title> <title render="italic">title of book or journal</title> volume number of journal if necessary. <imprint>place of publication: publisher's name <date type="publication">[publication date of book.] OR [publication date: page numbers of article.]</date> </imprint> Optional location information, or anything else necessary to say. (If you want it to display on separate lines, use additional <lb/> where desired. </bibref> </pre> <p>Use a separate <bibref> for each work in the bibliography. The RENDER attribute in <title> determines whether a title is placed in quotation marks or italicized. The author may be <corpname role="author"> instead of <persname role="author"> for a corporate author instead of an individual one. Use whichever tags are needed for each item.</p> <p>Example 1 of detailed <bibliography> with <bibref>:</p> <pre> <bibliography> <head>Bibliography</head> <bibref> <title render="quoted">Letter Book of Francis Jerdone.</title> <title render="italic">William and Mary Quarterly,</title> 1st series, XIV. <imprint> <date type="publication">1905-1906: 141-145.</date> </imprint> </bibref> <bibref> <persname role="author">Pilaro, Frances Maria.</persname> <title render="quoted">The Jerdone Family: Changing Family Relationships in the Early National Period</title> <imprint> <date type="publication">1988.</date> </imprint> Honors Thesis, Swem Library, College of William and Mary. <lb/> Call Number: LD6051 .W5m Hist. 1988 P54 </bibref> </bibliography> </pre> <p>Example 2 of detailed bibliography with <bibref>:</p> <pre> <bibliography> <head>Bibliography</head> <bibref> </pre>
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	<pre> <persname role="author">Beverley, Robert. </persname> <title render="italic">The history of Virginia, in four parts. By Robert Beverley, a native and inhabitant of the place. Reprinted from the author's 2d rev. ed., London, 1722. With an introduction by Charles Campbell.</title> <imprint>Richmond: J. W. Randolph, <date type="publication">1855.</date> </imprint> </bibref> <bibref> <persname role="author">Bland, Theodorick. </persname> <title render="italic">The Bland Papers. </title> Edited by Charles Campbell. <imprint>Petersburg: E. & J. Ruffin, <date type="publication">1840.</date> </imprint> </bibref> </bibliography> </pre>
	<pre> </bibliography> </pre>
NR	<pre> <fileplan> <head>File Plan</head> <p>Description of original filing plan.</p> </fileplan> </pre> <p>The <fileplan> gives the classification scheme for arranging, storing, and retrieving the materials originally used by the records creator. This element is rarely used. Do not confuse it with <arrangement> and <organization>. See the EAD Tag Library for further information.</p>
	<pre> </add> </pre>
NR	<pre> <add> <head>Index</head> <p>optional statement about nature of index</p> <index> </pre> <p>In order to work properly in the Virginia Heritage Project, <index> must be all by itself in <add>. Close the <add> containing any other subelements such as <relatedmaterial>, then open a new <add> for the <index>, as shown in this template. Note that this is not standard EAD usage.</p>
	<pre> [<indexentry> <name>Last name, first name</name> <ref>collection materials or location referenced</ref> </indexentry>] </pre> <p>OR</p>

```
[ <indexentry>
  <subject>Subject term</subject>
  <ptrgrp>
    <ref>collection materials or location referenced</ref>
    <ref>collection materials or location referenced</ref>
    <ref>collection materials or location referenced</ref>
  </ptrgrp>
</indexentry> ]
```

OR

```
[ <list>
  <item>name or subject and simple reference</item>
  <item>name or subject and simple reference</item>
</list> ]
```

In correct EAD usage, <indexentry> contains an access element and a pointer or reference element which can be used to link to the appropriate target elsewhere in the finding aid. Plain text cannot be used in <indexentry>. However, in the Virginia Heritage Project, actual linking from pointer or reference elements is not supported. Therefore, the reference information acts as plain text.

The access element is most often tagged as <name> or <subject>, although <persname>, <corpname>, <famname>, <geogname>, <function>, <occupation>, or <genreform> may also be used.

The reference element is tagged as <ref>. If there are multiple reference elements for a single access element, as shown in the second template option above, group them using <ptrgrp>.

<ref> will display on a separate line below the access element. The display can be varied with additional coding if desired. The second example shows an index with clusters of references under bold-face name headings.

Example 1:

```
<add>
  <head>Index of Major Correspondents and Subjects</head>
  <index>
    <indexentry>
      <name>Allen, William</name>
      <ref>Box 3, folder 14</ref>
    </indexentry>
    <indexentry>
      <name>Amelia Co.</name>
      <ref>Box 5, folder 2</ref>
```

```

</indexentry>
<indexentry>
  <subject>apprenticeship</subject>
  <ref>Box 2, folder 5</ref>
</indexentry>
<indexentry>
  <name>Arthur, Tabitha</name>
  <ptrgrp>
    <ref>Box 3, folder 6</ref>
    <ref>Box 4, folder 1</ref>
  </ptrgrp>
</indexentry>
</index>
</add>

```

Example 2:

```

<add>
  <head>Index to Materials</head>
  <p>The following index contains an alphabetical overview of selected key
    correspondents. The correspondents included are historians, editors, and
    authors who wrote to or received materials from Charles Campbell.</p>
  <index>
    <indexentry>
      <persname>
        <emph render="bold">Bancroft, George (1800-1891)</emph>
      </persname>
      <ptrgrp>
        <ref>George Bancroft, Boston, to Charles Campbell, Petersburg, 25 March
          1840. Box-folder: 4:8.</ref>
        <ref>George Bancroft, New York, to [Charles Campbell?], 23 April 1860.
          Box-folder: 12:45.</ref>
      </ptrgrp>
    </indexentry>
    <indexentry>
      <persname>
        <emph render="bold">Barnard, Henry (1811-1900)</emph>
      </persname>
      <ptrgrp>
        <ref>H[enry] Barnard, New Haven, Connecticut, to Mildred W. Campbell,
          Petersburg, 23 December 1833. Box-folder: 2:46.</ref>
        <ref>[Charles Campbell], Somerville, Alabama, to Henry Barnard, 7 February
          1835. Box-folder: 3:7.</ref>
        <ref>Henry Barnard, Washington, to Charles Campbell, 4 March 1869. Box-
          folder: 14:61.</ref>
      </ptrgrp>
    </indexentry>
  </index>
</add>

```

```

</ptrgrp>
</indexentry>
</index>
</add>

```

For short, simple indexes in which each entry should display all on one line, an easy alternative to <indexentry> is <list>. Each <item> in <list> is the equivalent of one <indexentry>. The disadvantages of using <list> instead of <indexentry> are that the references cannot be displayed on separate lines from the access point, and that links for the user cannot be added in future without completely retagging the index.

Example of one-line entries using <list>:

```

<add>
  <head>William Lightfoot Account Book Index</head>
  <p>The following index provides page numbers where the listed people or terms
  may be found.</p>
  <index>
    <list>
      <item>Acrill, William, Charles City, 42, 160, 218</item>
      <item>Adams, Patrick, Dr., Surry, 41</item>
      <item>attorneys, 139, 206</item>
      <item>Banister River Plantation, 75</item>
    </list>
  </index>
</add>

```

For some types of index, the access element and the reference are a unified piece of information. In such a case, it may work best to put all the information into the access element (or into the reference element, if a link is desired), as shown in this example:

Example of one-line entries using <indexentry>:

```

<add>
  <head>Samuel McNutt Letter Index</head>
  <p>List of letters written home from Samuel McNutt of Company H, 12th
  Pennsylvania Reserves, at camps in Maryland and Delaware.</p>
  <index>
    <indexentry>
      <subject>Camp Curtain – Sunday, Probably July, 1851.</subject>
    </indexentry>
    <indexentry>
      <subject>Camp Georgetown Heights – 14 August 1851.</subject>
    </indexentry>
    <indexentry>
      <subject>Hagerstown, Maryland, 26 June 1861 – Camp Negley,
      Washington County, Maryland.</subject>

```

	<pre> </indexentry> </index> </add> </pre>
	<pre> </index> </add> </pre>

I. Controlled access <controlaccess>

Overview

Placing the most significant names and topical terms in <controlaccess> ensures that they are searchable using a standardized form of name or term. Use of <controlaccess> is optional. Each repository will make a decision about the use of <controlaccess> in its finding aids depending on time and resources available and on institutional policy. Institutions that create MARC-format catalog records for their collections often put the 6xx fields into <controlaccess>. (If an institution wishes to generate a MARC record from the EAD record, the encoding analog attribute can be used to identify the MARC field number for each name or term.)

Project participants should keep in mind that the Virginia Heritage Project makes no commitment to update controlled access terms when there is a change in the standardized vocabulary that they are based on. It is the responsibility of each repository to be aware of changes in the controlled vocabularies it uses, and make changes to its own EAD finding aids as needed.

The following elements are directly available in <controlaccess> for the purpose of creating lists of names, titles, and terms. Refer to the *EAD Tag Library* for a full discussion of each element.

- <corpname> Corporate name
- <famname> Family name
- <function> Function
- <genreform> Genre/Form terms
- <geogname> Geographic name
- <occupation> Occupation
- <persname> Personal name
- <subject> Subject terms
- <title> Uniform title

While the <name> element is also available in EAD, its use in <controlaccess> is not allowed in the Virginia Heritage Project.

Lists of corporate names, family names, personal names, etc., can be given as one undifferentiated list. For short lists, this is the recommended method. Each category can also be given its own section with a <head> element. Each <head> tag must be immediately preceded by a <controlaccess> tag. This method is recommended for longer

lists. A combination of the two approaches is also possible. For example, a finding aid may have long lists of personal names and subject terms, but only a few functions, occupations, etc. The first two can be grouped in their own sections using the category headings “Persons” and “Subjects,” respectively, with the remainder grouped together under the heading “Other Terms.”

A <head> for the entire controlled access section is required, regardless of whether or not category <head>s are used.

Introductory text or instructions on interpretation and use of <controlaccess> can be given between the head and the list using <p>...</p>.

Note: The <list> element should not be used in <controlaccess>.

Template for undifferentiated list

NR	<controlaccess> <head>Index Terms</head>
NR	<persname> <i>surname, forename, birth-death dates if desired.</i> </persname> <persname> <i>another surname, forename, optional dates.</i> </persname> Place each access term in a separate element. <persname>, <famname>, <subject>, and all the rest of the elements in <controlaccess> may be repeated as many times as needed. Example: <persname>Reimann, Lewis Charles, 1909-1978.</persname> <persname> Evans, Thomas.</persname> This element is comparable to MARC field 600 (or, in some cases, 700). Repositories desiring a close correspondence between their EAD and MARC records may choose to use the ENCODINGANALOG and/or SOURCE attributes: Examples with attributes: <persname encodinganalog="600" source="lcnaf">Reimann, Lewis Charles, 1909-1978.</persname> <persname encodinganalog="600"> Evans, Thomas</persname>
NR	<famname> <i>name family.</i> </famname> This element is comparable to MARC field 600. As in <persname>, attributes may be used. Example: <famname>Cabell family.</famname> Example with attributes:

	<code><famname encodinganalog="600" source="lcnaf">Cabell family.</famname></code>
NR	<p><code><corpname>name of company, organization, or group</corpname></code></p> <p>This element is comparable to MARC field 610. As in <code><persname></code>, attributes may be used.</p> <p>Example:</p> <p><code><corpname>Lynchburg Female Seminary.</corpname></code> <code><corpname>Colonial Williamsburg Foundation.</corpname></code> <code><corpname>Mayo Cabell & Co. (Lynchburg, Va.)</corpname></code></p> <p>Example with attributes:</p> <p><code><corpname encodinganalog="610">Lynchburg Female Seminary.</corpname></code> <code><corpname encodinganalog="610" source="lcnaf">Colonial Williamsburg Foundation.</corpname></code> <code><corpname encodinganalog="610">Mayo Cabell & Co. (Lynchburg, Va.)</corpname></code></p>
NR	<p><code><subject>topical subject term</subject></code></p> <p>This element is comparable to MARC field 650. As in <code><persname></code>, attributes may be used.</p> <p>Example:</p> <p><code><subject>Merchants- -Virginia- -History- -19th century.</subject></code> <code><subject>Plantation houses.</subject></code></p> <p>Example with attributes:</p> <p><code><subject encodinganalog="650" source="lcnaf">Merchants- -Virginia- -History- -19th century.</subject></code> <code><subject encodinganalog="650" source="aat">Plantation houses.</subject></code></p>
NR	<p><code><title>uniform title</title></code></p> <p>The <code><title></code> element is for a uniform title that is considered a significant subject within the collection. It has nothing to do with the collection title, nor with the <code><unittitle></code> of the series, folders, and items within the collection. This element is infrequently used.</p>
NR	<p><code><function>function term</function></code></p> <p>This element is comparable to MARC field 657. As in <code><persname></code>, attributes may be used.</p> <p>Example:</p> <p><code><function>Law enforcing.</function></code></p> <p>Example with attributes:</p>

	<code><function encodinganalog="657" source="aat">Law enforcing.</function></code>
NR	<p><code><genreform>genre or form term</genreform></code></p> <p>This element is comparable to MARC field 655. As in <code><persname></code>, attributes may be used.</p> <p>Example: <code><genreform>Architectural drawings.</genreform></code></p> <p>Example with attributes: <code><genreform encodinganalog="655" source="gmgpc">Architectural drawings.</genreform></code></p>
NR	<p><code><geogname>geographical name</geogname></code></p> <p>This element is comparable to MARC field 651. As in <code><persname></code>, attributes may be used.</p> <p>Example: <code><geogname>Nelson County (Va.)- -History.</geogname></code></p> <p>Example with attributes: <code><geogname encodinganalog="651">Nelson County (Va.)- -History.</geogname></code></p>
NR	<p><code><occupation>occupation term</occupation></code></p> <p>This element is comparable to MARC field 656. As in <code><persname></code>, attributes may be used.</p> <p>Example: <code><occupation>Merchants.</occupation></code></p> <p>Example with attributes: <code><occupation encodinganalog="656" source="aat">Merchants.</occupation></code></p>
	<code></controlaccess></code>

Template for differentiated list

For MARC encoding analogs and use of attributes in these elements, see the Template for undifferentiated list, above.

NR	<code><controlaccess></code> <code><head>Index Terms</head></code>
NR	<code><controlaccess></code>

	<pre> <head>Persons: </head> <persname>surname, forename</persname> <persname> surname, forename</persname> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Family Names: </head> <famname>name Family</famname> <famname>name Family</famname> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Corporate Names: </head> <corpname>name of company, organization, or group</corpname> <corpname>name of company, organization, or group</corpname> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Subjects: </head> <subject>topical subject term</subject> <subject>topical subject term</subject> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Geographical Names: </head> <geogname>geographical name</geogname> <geogname>geographical name</geogname> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Titles: </head> <title>uniform title</title> <title>uniform title</title> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Functions: </head> <function>function term</function> <function>function term</function> </controlaccess> </pre>
NR	<pre> <controlaccess> <head>Genre and Form Terms: </head> <genreform>genre or form term</genreform> <genreform>genre or form term</genreform> </pre>

	</controlaccess>
NR	<controlaccess> <head>Occupations:</head> <occupation>occupation term</occupation> <occupation>occupation term</occupation> </controlaccess>
	</controlaccess>

J. Description of Subordinate Components <dsc>

Description of Subordinate Components <dsc> is used for container lists, series descriptions, and other descriptive lists, and is usually the largest and most complex section of the finding aid. The <dsc> is Part 3 in the Virginia Heritage Project's EAD forms. It is possible to have a complete finding aid without a <dsc> section, but nearly all finding aids include at least one subordinate level. A collection which is small or simple in its content may include only one subordinate level along with the high level:

Collection or record group (high-level description)
 File

A three-level structure is probably most typical:

Collection or record group (high-level description)
 Series
 File

A complex collection might include a number of levels of description:

Collection or Record Group (high-level description)
 Subgroup
 Series
 Subseries
 File
 Item

In some cases, there may be additional hierarchies within File or Item. In the Virginia Heritage Project, it is technically possible to have up to twelve nested levels within a collection.

J.1. Multi-level description

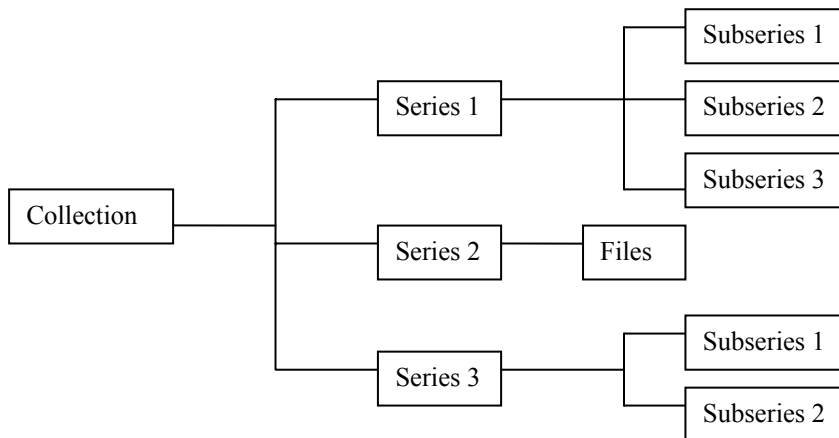
The EAD structure is designed to accommodate multi-level description, which has long been the preferred approach to creating finding aids for archival materials. The *Online Archive of California Best Practice Guidelines, Version 1.0* offers the following four fundamental rules to guide the multi-level description of archival materials:

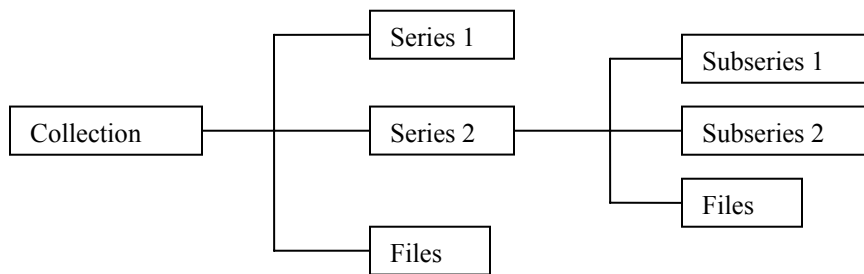
- Present all archival description in a *hierarchical whole-to-part relationship* that proceeds from general description of the collection to more specific descriptions of parts of the collection.

- At each hierarchical level, *give only information relevant to that particular 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, *nest the description at each level within the description at its next higher level*. Also, identify each level of description (i.e., give it a label, such as “series”).

The number of levels and type of levels will vary depending on the needs of the collection and the practices of each institution. It is not necessary to describe every part of the collection to the same level. However, when a collection is subdivided into series, then all materials in the collection must be assigned to one of the series. Likewise, when a series is divided into subseries, then all materials in the series must be assigned to one of the subseries. The *Online Archive of California Best Practice Guidelines* says this is known as “balanced archival description.” The organization of a collection is “unbalanced” if it places file or item description at the *same level* as subdivisions such as series, subseries, or subgroups *within the same group of subordinate components*. Unbalanced finding aids should be avoided. They may confuse the researcher and may not display properly online.

Balanced archival description.



Unbalanced archival description.

Each series, subseries, subgroup, file, or item starts with a component tag <c>. The <c> tag is numbered to help keep track of the nested levels. The highest level is tagged as <c01>, the next level within it is <c02>, and so forth. **The number does not correlate directly with a particular type of descriptive level.** If a collection has file-level descriptions organized into series, each series would be <c01 level="series"> and the file would be <c02 level="file">. If a collection is not subdivided into any type of series, the highest level might be <c01 level="file"> or even <c01 level="item">. In the diagram of Balanced Archival Description above, Series 1 would be <c01 level="series">, its Subseries 1 would be <c02 level="subseries">, and files within Subseries 1 would be <c03 level="file">; while Series 2 would be <c01 level="series"> but its files would be <c02 level="file">. It is always a good idea to use the LEVEL attribute.

The Virginia Heritage Project does not allow the use of <c> tags without numbers. Only <c01>, <c02>, <c03>...<c12> are permitted by VHP.

J.2. Major subdivisions: Series, Subseries, or Subgroups

Many of the tags used in the high-level description of the whole collection also occur within the <dsc> to describe parts of the collection. The nature of the information given in a specific tag will usually be the same whether that tag occurs in the high-level description or the component-level description. Keep in mind that, according to the principles of multi-level description, information should not be repeated at a lower level of description if it has already been given at a higher level.

The following template shows all possible elements for describing a major subdivision. However, most of the elements are rarely needed at this level. The discussion in the template specifies which elements are recommended in best practice. The required and/or recommended elements for a good series description are <c0x>, <did>, <unittitle>, <unitdate>, <container>, <scopecontent>, and <arrangement>. An example of typical series and subseries best-practice description is given after the template.

R	<p><code><dsc type="[combined] OR [analyticover]"></code></p> <p>The TYPE attribute in the <code><dsc></code> is used to specify each type of description. The TYPE attribute offers four values, but choose one of these two when the description includes major subdivisions:</p> <p>“combined” = each series description is followed by the container list for that series</p> <p>“analyticover” = series descriptions only</p> <p>The other two attributes are “in-depth,” which is for container lists without major subdivisions, and “othertype,” discussed in section J.5.</p>
R	<p><code><head>[Contents List] OR [Components List] OR [other heading]</head></code></p> <p>Each institution will choose its own preferred head, or set of heads if the institution wishes to differentiate between multiple types of descriptive lists. Contents List, Components List, Items List, and Container List are among the heads used by Virginia Heritage Project participants.</p>
R	<p><code><c01 level="[series] OR [subseries] OR [subgrp]"></code></p>
NR	<p><code><head>Series 1</head></code></p> <p>If this <code><head></code> is used, do not use the LABEL attribute in <code><unittitle></code>. Although the preferred practice for the Virginia Heritage Project is to use LABEL, some institutions prefer to use <code><head></code> for display reasons. If a collection contains both series and subseries, for example, using a <code><head></code> for the series and LABEL for the subseries will result in a more prominently displayed heading for the series than for the subseries.</p>
R	<p><code><did></code></p>
R	<p><code><unittitle label="Series 1">title of series</code></p> <p>If the LABEL attribute is used, do not use a <code><head></code> for the series.</p> <p>Example:</p> <pre><c01 level="series"> <did> <unittitle label="Series 1">Correspondence, <unitdate type="inclusive">1940-1945</unitdate></unittitle></pre>
NR	<p><code><unitdate type="[inclusive] OR [bulk] OR [single]">dates of series</unitdate></code></p> <p>Although dates are not required, they are often useful. The TYPE label specifies which of the three types of date is given.</p> <p><code></unittitle></code></p>
NR	<p><code><container label="[Box-folder] OR [Box] OR [other choice]" type="[box-folder] OR [box] OR [other choice as shown below]">container or range of</code></p>

containers</container>

Container information is not required, but it is strongly recommended if the institution uses container information for retrieval. Paper-based finding aids often show container information only at the file and item levels, and not at the series level. Online searches may return a series description without the subordinate file descriptions, however, so the best practice is to handle container information uniformly at all descriptive levels.

The following list gives the range of choices for the TYPE and LABEL attributes.

TYPE	LABEL
box	Box
folder	Folder
box-folder	Box-folder
carton	Carton
reel	Reel
frame	Frame
reel-frame	Reel-frame
volume	Volume
folio	Folio
page	Page
sleeve	Sleeve
oversize	Oversize
map-case	Map-case
drawer	Drawer
othertype	[<i>Other label</i>]

The most frequently used is Box-folder. The number is then given with a colon separating the box number from the folder number. This format is efficient for expressing a range of folders or boxes.

Examples:

```
<container label="Box-folder" type="box-folder">4:10-5:3</container>
```

```
<container label="Carton" type="carton">6</container>
```

```
<container label="Volumes" type="volume">1-28</container>
```

```
<container label="Shelf-bin" type="othertype" >12 C</container>
```

The Virginia Heritage Project strongly recommends use of the Box-folder type instead of using two separate container tags for Box and for Folder.

The LABEL may be given as a plural noun instead of a singular noun if desired, as shown in the third example above, or created uniquely by the repository in conjunction with TYPE="othertype", as shown in the fourth example above.

NR	<p><code><physdesc></code><i>physical description of this portion of the collection</i><code></physdesc></code></p> <p><code><physdesc></code> is an optional element, to be used if the information would assist the researcher. It might be used in explaining the extent of the series (ex: <code><physdesc></code>250 cu. ft.<code></physdesc></code>) or the nature of the materials (ex. <code><physdesc></code>108 glass plate negatives and 63 prints.<code></physdesc></code>).</p> <p>Subelements available in <code><physdesc></code> include:</p> <ul style="list-style-type: none"> <code><extent></code> for a quantity reference <code><genreform></code> to specify the type of materials, often used for visual materials <code><physfacet></code> to note features of the appearance such as color <code><dimensions></code> for the measurements of an item <p>Encoding subelements within <code><physdesc></code> requires additional time and resources. Some institutions in the Virginia Heritage Project have chosen to use these subelements, while others have not. The advantage to more detailed encoding is that it allows for future fine-tuning of searching and display. See the EAD Tag Library and EAD Guidelines for more information about and examples of the use of these subelements in <code><physdesc></code>.</p>
	<code></did></code>
NR	<p><code><altformavail></code> <code><p></code><i>information about alternative forms</i><code></p></code> <code></altformavail></code></p> <p>Provides the researcher with information concerning the availability of these materials in other forms such as microfilm or videotape or published transcription. Use this element if only certain series or subseries, but not the whole collection, are available in the alternative form (for example, if Series 2 and 3 have been microfilmed but not Series 1, 4, and 5). The wording should usually be similar to the <code><altformavail></code> at the did-level.</p> <p>This element is comparable to MARC field 530.</p>
NR	<p><code><scopecontent></code> <code><p></code><i>summary of what's in the series</i><code></p></code> <code></scopecontent></code></p> <p>Strongly recommended, even for series with informative titles. <code><scopecontent></code> summarizes the range and topical coverage of the materials in the series, often mentioning their form and organization, and naming significant individuals, organizations, and subjects.</p>
NR	<p><code><bioghist></code> <code><p></code><i>biographical or historical information pertaining to the series</i><code></p></code> <code></bioghist></code></p> <p>Use this element only when appropriate. Do not repeat the same information that</p>

	<p>is in the high-level <bioghist> for the whole collection. However, it is acceptable to give summary information in the high-level <bioghist> and a much more detailed version in the series-level <bioghist>. For example, one series of a collection of personal papers might pertain to the person’s involvement with a civic group. The <bioghist> and <scopecontent> for the collection would mention his involvement with the group and that his involvement was documented in one series of the collection. The <bioghist> for the series might give details (including dates) explaining that the person was instrumental in founding the civic group, that he served as its president for three terms including the period when the group was involved in certain important community activities, and that he broke with the group when a political disagreement split it in two.</p>
NR	<p><arrangement> <p><i>what order the materials are in</i></p> </arrangement></p> <p>Recommended. <arrangement> tells the filing sequence of the materials such as alphabetical, chronological, or numerical, and major deviations from that sequence such as “oversize materials filed at end”.</p>
NR	<p><organization> <p><i>how the series is subdivided</i></p> </organization></p> <p><organization> summarizes the manner in which the materials have been subdivided into smaller units, so this field should only be used if there are subdivisions below this unit, such as subseries—and even then, only if necessary.</p>
NR	<p><add></p> <p>The same elements that are available under <add> in the high-level description are also available here:</p> <ul style="list-style-type: none"> <separatedmaterial> <relatedmaterial> <otherfindaid> <bibliography> <fileplan> <index> <p>However, these elements will be needed at the series level only on very rare occasions. In nearly every case, such information properly belongs in the high-level description, not within the <dsc>. In EAD version 2002, <add> will not be used; its subelements will be directly available at the component level.</p> <p></add></p>
NR	<p><c02 level="[subseries] OR [file] OR [item]"></p> <p>The next level of the <dsc> may be another major subdivision, if the series has several subseries. If so, the same elements are available as for <c01>.</p>

	<p>If the next level of the <dsc> is file or item level description, use the templates given in the next two sections of Chapter III.</p> <pre></c02> <c02...rest of container list for this series...</c02></pre>
	<pre></c01></pre> <p>Note that a higher level should completely surround a subordinate level, with its closing tag coming after the subordinate level descriptions are all closed, or the finding aid will not load and display properly.</p> <pre><c01...rest of series in the collection...</c01></pre>
	<pre></dsc> </archdesc></pre>

Example of typical series and subseries best-practice description:

```
<dsc type="combined"
  <head> Components List</head>
  <c01 level="series">
    <did>
      <unittitle label="Series I">Correspondence, <unitdate type="inclusive">1900-
1960</unitdate>
      </unittitle>
      <container label="Box" type="box">1-3</container>
      <physdesc>3 cubic feet</physdesc>
    </did>
    <scopecontent>
      <p>Includes personal and business correspondence... </p>
    </scopecontent>
    <c02 level="subseries">
      <did>
        <unittitle label="Subseries A">Personal, <unitdate type="inclusive">1900-
1960</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">1:1-2:12</container>
      </did>
      <scopecontent>
        <p>Jane Jones maintained a regular correspondence with many of the
prominent artists... </p>
      </scopecontent>
      <arrangement>
        <p>Arranged alphabetically by correspondent.</p>
      </arrangement>
      ...descriptions of all the folders in Series I, Subseries A, at level <c03>...
    </c02>
```

```

    ...descriptions of Series I, Subseries B and its folders...
  </c01>
  ...start of Series II, at component level <c01>, with all its subseries and folders...
  ...Series III, etc. ...
</dsc>
</archdesc>

```

J.3. File-level description

At many repositories, collections are typically described at the file (or “folder”) level in the finding aid. In EAD, file might be used to mean a folder, a group of related folders collectively described, or multiple items within a folder.

Flat versus hierarchical file description

Often, especially in large collections, there are clusters of folders that pertain to the same subject. EAD allows for such files to be described in hierarchical groupings if desired, instead of just a “flat” list. The *Online Archive of California Best Practice Guidelines, Version 1.0*, offers the following discussion of “flat” versus hierarchical description. (Notice that the presence or absence of major subdivisions such as series is irrelevant to whether the file-level descriptions are flat or hierarchical.)

“A repository may follow any of several approaches when encoding file-level descriptions, resulting in either a ‘flat’ end product or one that uses hierarchical inheritance (the latter achieves the same effect provided by an indented print presentation). In the ‘flat’ product, all file-level descriptions are encoded at a single component <c0x> level. In the hierarchical project, EAD’s nested component structure is used. Both approaches are legitimate, but the resulting appearance of finding aid container lists varies significantly from one to the other.

“Note how much more economical, and how much less repetitive, the hierarchical example is. . . . It is not only more easily comprehensible for viewing; it also avoids delivery of redundant search results, because each term is presented at only one level instead of at multiple levels.”

Online Archive of California Best Practice Guidelines, Version 1.0, pp. 22-23.

The first example below shows a flat display of file-level descriptions. The series title would be encoded at <c01> level, and each of the following files at <c02>.

Series 3. Student Health Service, 1970-1997. 6.2 linear feet.
 Health Education Program, articles and clippings, 1972-1986 (Box-folder 6:1)
 Health Education Program, correspondence and miscellaneous materials, 1979-1982. 3 folders (Box-folder 6:2-4)
 Health Education Program, Health Education Outreach Program, correspondence and miscellaneous papers, 1983-1997 and undated. 2 folders (Box-folder 6:5-6)
 Health Education Program, Health Education Outreach Program, final reports, 1979-1981 (Box-folder 6:7)
 Health Education Program, Health Education Outreach Program, grant application, 1980 (Box-folder 6:8)
 Religion and spirituality, 1991-1993 (Box-folder 6:9)
 Returning women, Ad Hoc Committee on Mature Women Students, 1975-1977 (Box-folder 6:10)
 Returning women, goal-setting and publicity materials, 1978-1980 (Box-folder 6:11)

File-level description in “flat” format (not recommended).

The next example shows the same file-level descriptions reformatted to use indentation to represent hierarchical inheritance. The series title would be encoded at <c01> level, and files would be at <c02>, <c03>, <c04>, and <c05> levels. Each <c0x> number corresponds to a level of indentation.

Series 3. Student Health Service, 1970-1997. 6.2 linear feet.
 Health Education Program (Box-folder 6:1-8)
 Articles and clippings, 1972-1986 (Box-folder 6:1)
 Correspondence and miscellaneous materials (Box-folder 6:2-4)
 1979 (Box-folder 6:2)
 1980 (Box-folder 6:3)
 1981-1982 (Box-folder 6:4)
 Health Education Outreach Program (Box-folder 6:5-8)
 Correspondence and miscellaneous papers (Box-folder 6:5-6)
 1983-1997 (Box-folder 6:5)
 undated (Box-folder 6:6)
 Final reports, 1979-1981 (Box-folder 6:7)
 Grant application, 1980 (Box-folder 6:8)
 Religion and spirituality, 1991-1993 (Box-folder 6:9)
 Returning women (Box-folder 6:10-11)
 Ad Hoc Committee on Mature Women Students, 1975-1977 (Box-folder 6:10)
 Goal-setting and publicity materials, 1978-1980 (Box-folder 6:11)

File-level description in “hierarchical” format (recommended).

The Virginia Heritage Project recommends the hierarchical approach where it is appropriate for the materials being described.

Template and discussion for file-level description

The following template shows all possible elements for describing materials at the file level. However, most of the elements are rarely needed at this level. The discussion in the template notes which elements are recommended in best practice. The required and/or recommended elements for a good file-level description are <c0x>, <did>, <unittitle>, <unitdate>, <container>, <physdesc>, and <scopecontent>.

Examples of typical best-practice file-level description, for both flat and hierarchical descriptive formats, are given after the template.

R	<p><dsc type="[in-depth] OR [combined]"></p> <p>The TYPE attribute in the <dsc> is used to specify each type of description. The TYPE attribute offers four values, but choose one of these two when the materials are described at the file level:</p> <ul style="list-style-type: none"> “in-depth” = container lists without major subdivisions such as series “combined” = each series description is followed by the container list for that series <p>The other two attributes are “analyticcover,” which is for series descriptions without container lists, and “othertype,” discussed in section J.5.</p>
R	<p><head>[Contents List] OR [Components List] OR [<i>other heading</i>]</head></p> <p>Each institution will choose its own preferred head, or set of heads if the institution wishes to differentiate between multiple types of descriptive lists. Contents List, Components List, Items List, and Container List are among the heads used by Virginia Heritage Project participants.</p>
R	<p><c01 level="file"></p> <p>If the TYPE attribute in the <dsc> is “in-depth”, the LEVEL attribute in <c01> will be either “file” or “item”.</p> <p>If the TYPE attribute in the <dsc> is “combined”, the LEVEL attribute in <c01> will be a major subdivision, and the file-level descriptions will occur at <c02>, or <c03>, on down to <c12> if needed. File-level description at any <c> number consists of the same elements.</p> <p>While the LEVEL attribute is not required at the file or item level, the Virginia Heritage Project strongly recommends the use of the LEVEL attribute for every component.</p>
R	<p><did></p>
R	<p><unittitle><i>title of file</i></p> <p><unitdate type="[inclusive] OR [bulk] OR [single]"><i>dates of file</i></unitdate></p>

	<p style="text-align: center;"><code></unittitle></code></p> <p>Although dates are not required, they are useful in most instances. The TYPE label specifies which of the three types of date is given.</p> <p>Frequently, descriptive titles in container lists are not differentiated from other descriptive text. When other descriptive text, including scope and content information, is given “inline” with the descriptive title, include the other descriptive text in the <code><unittitle></code> element. If the other descriptive text is given as a block of text separated from the title by a line break or additional line spacing, however brief the block may be, encode the distinct block with the appropriate element, e.g. <code><scopecontent></code>. If an extent statement is embedded within the descriptive title block, it cannot be encoded as a distinct element. However, if the extent statement comes at the end of the title block, encode it using the <code><physdesc></code> element.</p>																																
<p>NR</p>	<p style="text-align: center;"><code><container label="[Box-folder] OR [Folder] OR [other choice]" type="[box-folder] OR [folder] OR [other choice as shown below]">container or range of containers</container></code></p> <p>Container information is not required, but it is strongly recommended if the institution uses container information for retrieval. Be sure that all the information needed for retrieval is given; if both the box and folder numbers are required to retrieve the file, for instance, it is generally advisable to use “Box-folder” rather than “Folder” alone.</p> <p>The following list gives the range of choices for the TYPE and LABEL attributes.</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">TYPE</th> <th style="text-align: left;">LABEL</th> </tr> </thead> <tbody> <tr><td>box</td><td>Box</td></tr> <tr><td>folder</td><td>Folder</td></tr> <tr><td>box-folder</td><td>Box-folder</td></tr> <tr><td>carton</td><td>Carton</td></tr> <tr><td>reel</td><td>Reel</td></tr> <tr><td>frame</td><td>Frame</td></tr> <tr><td>reel-frame</td><td>Reel-frame</td></tr> <tr><td>volume</td><td>Volume</td></tr> <tr><td>folio</td><td>Folio</td></tr> <tr><td>page</td><td>Page</td></tr> <tr><td>sleeve</td><td>Sleeve</td></tr> <tr><td>oversize</td><td>Oversize</td></tr> <tr><td>map-case</td><td>Map-case</td></tr> <tr><td>drawer</td><td>Drawer</td></tr> <tr><td>othertype</td><td>[Other label]</td></tr> </tbody> </table> <p style="text-align: center;">The most frequently used is Box-folder. The number is then given with a colon</p>	TYPE	LABEL	box	Box	folder	Folder	box-folder	Box-folder	carton	Carton	reel	Reel	frame	Frame	reel-frame	Reel-frame	volume	Volume	folio	Folio	page	Page	sleeve	Sleeve	oversize	Oversize	map-case	Map-case	drawer	Drawer	othertype	[Other label]
TYPE	LABEL																																
box	Box																																
folder	Folder																																
box-folder	Box-folder																																
carton	Carton																																
reel	Reel																																
frame	Frame																																
reel-frame	Reel-frame																																
volume	Volume																																
folio	Folio																																
page	Page																																
sleeve	Sleeve																																
oversize	Oversize																																
map-case	Map-case																																
drawer	Drawer																																
othertype	[Other label]																																

	<p>separating the box number from the folder number. This format is efficient for expressing a range of folders as well as a single folder. (For an example of how to use <container> and <physdesc> to indicate a range of folders, see the example for <arrangement> later in this template.)</p> <p>Examples:</p> <p><container label="Box-folder" type="box-folder">4:10-5:3</container></p> <p><container label="Volumes" type="volume">1-15</container></p> <p><container label="Shelf-bin" type="othertype">12 C</container></p> <p>The Virginia Heritage Project strongly recommends use of the Box-folder type instead of using two separate container tags for Box and for Folder.</p> <p>The LABEL may be given as a plural noun instead of a singular noun if desired, as shown in the second example above, or created uniquely by the repository in conjunction with TYPE="othertype", as shown in the third example above.</p>
NR	<p><physdesc><i>physical description of this portion of the collection</i></physdesc></p> <p><physdesc> is an optional element which is often useful. Its use is particularly recommended when the file consists of multiple folders, for repositories which include an item count for each folder in the container list, or to indicate the format of the materials.</p> <p>Examples:</p> <p><physdesc>3 folders</physdesc></p> <p><physdesc>23 items</physdesc></p> <p><physdesc>bound letterpress volume</physdesc></p> <p>Subelements available in <physdesc> include:</p> <ul style="list-style-type: none"> <extent> for a quantity reference <genreform> to specify the type of materials, often used for visual materials <physfacet> to note features of the appearance such as color <dimensions> for the measurements of an item <p>Encoding subelements within <physdesc> requires additional time and resources. Some institutions in the Virginia Heritage Project have chosen to use these subelements, while others have not. The advantage to more detailed encoding is that it allows for future fine-tuning of searching and display. See the EAD Tag Library and EAD Guidelines for more information about and examples of the use of these subelements in <physdesc>.</p>
	<p></did></p>

NR	<p><code><altformavail></code> <code><p>information about alternative forms</p></code> <code></altformavail></code></p> <p>Provides the researcher with information concerning the availability of these materials in other forms such as microfilm or videotape or published transcription.</p> <p>If only one or a few files within the collection are available in an alternative form (for example, if a folder of letters has been reprinted in a journal article), it is appropriate to use <code><altformavail></code> here in the file-level description, but it may not be necessary to use <code><altformavail></code> at the did-level also.</p> <p>This element is comparable to MARC field 530.</p>
NR	<p><code><scopecontent></code> <code><p>summary of what's in the file</p></code> <code></scopecontent></code></p> <p><code><scopecontent></code> summarizes the nature of the materials in the file and/or their intellectual content. It is frequently useful at the file level, even for files with informative titles, since many folder titles give the topic without any hint of form (e.g. Garden Club) or the form (e.g. Correspondence) without much clue to the topics. Also, full or standardized forms of names can appear in the <code><scopecontent></code> to make them searchable regardless of whether or how the name appears in the file title.</p> <p>Optionally, an institution may choose to use <code><abstract></code> within the <code><did></code> instead of <code><scopecontent></code>, for display and retrieval reasons.</p>
NR	<p><code><bioghist></code> <code><p>biographical or historical information pertaining to the file</p></code> <code></bioghist></code></p> <p>This element is seldom used at the file level, but may occasionally be helpful in providing contextual information for the researcher that is not available in the file itself. (If the information comes from the materials in the file, the information belongs in <code><scopecontent></code>.) Some examples of the use of <code><bioghist></code> might be: to explain family connections among a group of correspondents; to explain the presence in personal papers of a file of brochures and catalogs from a private school by noting that the person's daughter attended it; to discuss which Civil War skirmishes took place near the home of a woman whose letters comment on foraging soldiers and wounded men.</p>
NR	<p><code><arrangement></code> <code><p>what order the materials are in</p></code> <code></arrangement></code></p> <p>Occasionally useful for a group of folders which are not individually described.</p>

	<p>Example:</p> <pre><c02 level="file"> <did> <unittitle>Constituent correspondence, <unitdate type="inclusive">1978- 1993</unitdate></unittitle> <container label="Box-folder" type="box-folder">5:6-21</container> <physdesc>16 folders</physdesc> </did> <arrangement> <p>Each year's correspondence is in a separate folder. Within each folder, letters are arranged alphabetically by correspondent.</p> </arrangement> </c02></pre>
NR	<pre><add></pre> <p>The same elements that are available under <add> in the high-level description are also available here, in the following order:</p> <pre> <separatedmaterial> <relatedmaterial> <otherfindaid> <bibliography> <fileplan> <index></pre> <p>However, it is difficult to imagine a reason to use any of these elements at the file level, except perhaps for <separatedmaterial> if a repository wishes to document items removed from the file. In EAD version 2002, <add> will not be used; instead, its subelements will be directly available at the component level.</p> <pre></add></pre>
NR	<pre><c02 level="[file] OR [item]"> ...lower-level description within the file, if the container list is not flat... </c02></pre>
	<pre></c01></pre>
	<pre><c01...next file or item...</c01></pre>
	<pre></dsc> </archdesc></pre>

Example of typical best-practice file-level description (simple collection):

```
<dsc type="in-depth">
<head>Contents List</head>
<c01 level="file">
  <did>
```

```

    <unittitle>Personal correspondence, <unitdate type="inclusive">1930-
1934</unitdate>
  </unittitle>
  <container label="Box-folder" type="box-folder">1:1</container>
  <physdesc>23 items</physdesc>
</did>
</c01>
<c01 level="file">
  <did>
    <unittitle>Personal correspondence, <unitdate type="inclusive">1935-
1938</unitdate>
    </unittitle>
    <container label="Box-folder" type="box-folder">1:2</container>
    <physdesc>41 items</physdesc>
  </did>
</c01>
<c01 level="file">
  <did>
    <unittitle>Diaries, <unitdate type="inclusive">1935-1938</unitdate>
    </unittitle>
    <container label="Box-folder" type="box-folder">1:3</container>
    <physdesc>3 volumes</physdesc>
  </did>
  <scopecontent>
    <p>Jones recorded the weather, social engagements, family events, and
comments on family members in her diaries.</p>
  </scopecontent>
</c01>
...rest of component descriptions...

```

Example of typical best-practice file-level description (complex collection with hierarchical format):

```

<dsc type="combined">
<head>Contents List</head>
<c01 level="series">
  <did>
    <unittitle label="Series 1">Legislative, <unitdate type="inclusive">1967-
1972</unitdate>
    </unittitle>
    <container label="Box" type="box">1-10</container>
  </did>
  <scopecontent>
    <p>The legislative files pertain primarily to committees on which Smith served.
They include both his interaction with other senators and correspondence with his
constituents on pertinent issues.</p>
  </scopecontent>
  <arrangement>

```

```

    <p>The files are grouped by committee, then arranged alphabetically within
each committee.</p>
  </arrangement>
  <c02 level="file">
    <did>
      <unittitle>Agriculture and Forestry</unittitle>
      <container label="Box-folder" type="box-folder">1:1-8</container>
    </did>
    <c03 level="file">
      <did>
        <unittitle>Agricultural Conservation Program <unitdate
type="inclusive">1969-1971</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">1:1</container>
      </did>
    </c03>
    <c03 level="file">
      <did>
        <unittitle>Consumer Agricultural Food Protection Act (S.2203) <unitdate
type="single">1970</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">1:2</container>
      </did>
    </c03>
    <c03 level="file">
      <did>
        <unittitle>Correspondence and memos, <unitdate type="inclusive"> 1969-
1972</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">1:3-6</container>
      </did>
    </c03>
    <c03 level="file">
      <did>
        <unittitle>Dairy <unitdate type="inclusive">1967-1969</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">1:7</container>
      </did>
    </c03>
    <c03 level="file">
      <did>
        <unittitle>Farm Credit Act (S.1483) <unitdate type="single">1971</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">1:8</container>
      </did>
    </c03>
  </c02>

```

...rest of Series 1...
 </c01>
 ...rest of component descriptions...

J.4. Item-level description

Some repositories choose to describe significant materials at the item level. Usually item-level description will be hierarchically subordinate to a file, a series, or a subseries. However, very small collections might have <c01 level="item">. It is perfectly acceptable to have a series containing a mix of items and files; this is not an “unbalanced” finding aid, because “file” and “item” both refer to materials rather than to organizational subdivisions.

It is not appropriate to create an item-level description that is hierarchically subordinate to another item-level description. The higher level is most likely to be a file, not an item. In difficult situations such as drafts of two different letters on one leaf of paper, or a cover letter that must be described separately from its enclosure, make two item-level records and comment on their connection in their scope notes, instead of trying to put one within the other.

Template and discussion for item-level description

The following template shows all possible elements for describing materials at the item level. However, most of the elements are rarely needed at this level. The discussion in the template notes which elements are recommended in best practice. The minimum elements for a good item-level description are <c0x>, <did>, <unittitle>, <unitdate>, and <container>; supplemented with <physdesc> and <scopecontent> as needed. An example of typical best-practice file-level description is given after the template.

R	<p><dsc type="[in-depth] OR [combined]"></p> <p>The TYPE attribute in the <dsc> is used to specify each type of description. The TYPE attribute offers four values, but choose one of these two when the materials are described at the item level:</p> <p>“in-depth” = container lists without major subdivisions such as series “combined” = each series description is followed by the container list for that series</p> <p>The other two attributes are “analyticcover,” which is for series descriptions without container lists, and “othertype,” discussed in section J.5.</p>
R	<p><head>[Contents List] OR [Components List] OR [<i>other heading</i>]</head></p> <p>Each institution will choose its own preferred head, or set of heads if the institution wishes to differentiate between multiple types of descriptive lists. Contents List, Components List, Items List, and Container List are among the heads used by Virginia Heritage Project participants.</p>

R	<p><c01 level="item"></p> <p>If the TYPE attribute in the <dsc> is “in-depth”, the LEVEL attribute in <c01> will be either “file” or “item”. If <c01 level="file">, item-level description may occur at <c02>.</p> <p>If the TYPE attribute in the <dsc> is “combined”, the LEVEL attribute in <c01> will be a major subdivision, and the item-level descriptions will occur at <c02>, or <c03>, on down to <c12> if needed.</p> <p>Item-level description at any <c> number consists of the same elements.</p> <p>While the LEVEL attribute is not required at the file or item level, the Virginia Heritage Project strongly recommends the use of the LEVEL attribute for every component.</p>
R	<p><did></p>
R	<p><unittitle><i>title of item</i> <unitdate type="[inclusive] OR [bulk] OR [single]"><i>dates of item</i></unitdate></p> <p>Although dates are not required, they are useful in most instances. The TYPE label specifies which of the three types of date is given. The date type is most often single at the item level, although an item such as a diary might have either inclusive or bulk dates.</p> <p>Frequently, descriptive titles in container lists are not differentiated from other descriptive text. When other descriptive text, including scope and content information, is given “inline” with the descriptive title, include the other descriptive text in the <unittitle> element. If the other descriptive text is given as a block of text separated from the title by a line break or additional line spacing, however brief the block may be, encode the distinct block with the appropriate element, e.g. <scopecontent>. If an extent statement is embedded within the descriptive title block, it cannot be encoded as a distinct element. However, if the extent statement comes at the end of the title block, encode it using the <physdesc> element.</p> <p></unittitle></p>
NR	<p><container label="[Box-folder] OR [Folder] OR [other choice]" type="[box-folder] OR [folder] OR [other choice as shown below]"><i>container number</i></container></p> <p>Container information is not required, but it is strongly recommended if the institution uses container information for retrieval. Be sure that all the information needed for retrieval is given; if both the box and folder numbers are required to retrieve the item, for instance, it is generally advisable to use “Box-</p>

	<p>folder” rather than “Folder” alone.</p> <p>The following list gives the range of choices for the TYPE and LABEL attributes.</p> <table data-bbox="609 346 982 934"> <thead> <tr> <th>TYPE</th> <th>LABEL</th> </tr> </thead> <tbody> <tr><td>box</td><td>Box</td></tr> <tr><td>folder</td><td>Folder</td></tr> <tr><td>box-folder</td><td>Box-folder</td></tr> <tr><td>carton</td><td>Carton</td></tr> <tr><td>reel</td><td>Reel</td></tr> <tr><td>frame</td><td>Frame</td></tr> <tr><td>reel-frame</td><td>Reel-frame</td></tr> <tr><td>volume</td><td>Volume</td></tr> <tr><td>folio</td><td>Folio</td></tr> <tr><td>page</td><td>Page</td></tr> <tr><td>sleeve</td><td>Sleeve</td></tr> <tr><td>oversize</td><td>Oversize</td></tr> <tr><td>map-case</td><td>Map-case</td></tr> <tr><td>drawer</td><td>Drawer</td></tr> <tr><td>othertype</td><td>[<i>Other label</i>]</td></tr> </tbody> </table> <p>The most frequently used is Box-folder. The number is then given with a colon separating the box number from the folder number. The Virginia Heritage Project strongly recommends use of the Box-folder type instead of using two separate container tags for Box and for Folder.</p> <p>Examples:</p> <pre><container label="Box-folder" type="box-folder">3:26</container></pre> <pre><container label="Volume" type="volume">8</container></pre> <pre><container label="Box-compartment" type="othertype">M15-D</container></pre> <p>The LABEL may be created uniquely by the repository in conjunction with TYPE="othertype", as shown in the third example above.</p>	TYPE	LABEL	box	Box	folder	Folder	box-folder	Box-folder	carton	Carton	reel	Reel	frame	Frame	reel-frame	Reel-frame	volume	Volume	folio	Folio	page	Page	sleeve	Sleeve	oversize	Oversize	map-case	Map-case	drawer	Drawer	othertype	[<i>Other label</i>]
TYPE	LABEL																																
box	Box																																
folder	Folder																																
box-folder	Box-folder																																
carton	Carton																																
reel	Reel																																
frame	Frame																																
reel-frame	Reel-frame																																
volume	Volume																																
folio	Folio																																
page	Page																																
sleeve	Sleeve																																
oversize	Oversize																																
map-case	Map-case																																
drawer	Drawer																																
othertype	[<i>Other label</i>]																																
NR	<pre><physdesc>physical description of item</physdesc></pre> <p><physdesc> is an optional element which may be useful to note the extent or type of material.</p> <p>Examples:</p> <pre><physdesc>4 pages. Autograph letter signed.</physdesc></pre> <pre><physdesc>Glass plate negative</physdesc></pre> <p>However, depending on the nature of the materials and the policy of the institution, it is also acceptable to give such information as part of</p>																																

	<p><scopecontent> and not use the <physdesc> element.</p> <p>Alternative example with both elements:</p> <pre><physdesc>Glass plate photonegative.</physdesc></did> <scopecontent> <p>View of the northwest corner of Main and Broad streets.</p> </scopecontent></pre> <p>Alternative example not using <physdesc>:</p> <pre><scopecontent> <p>Glass plate negative showing a view of the northwest corner of Main and Broad streets.</p> </scopecontent></pre> <p>Using <physdesc> at the item level is unnecessary if it simply repeats the same information given at a higher level of description. For example, if Series V of a collection is described as glass plate negatives, and then each negative is listed at the item level, it would be redundant to repeat “<physdesc>Glass plate negative</physdesc>“ for every item. But if some of the images also have prints with the negatives, and others do not, then an item-level <physdesc> would contain useful information.</p> <p><physdesc> is particularly useful when describing artifacts at the item level. Subelements available in <physdesc> include:</p> <ul style="list-style-type: none"> <extent> for a quantity reference <genreform> to specify the type of materials, often used for visual materials <physfacet> to note features of the appearance such as color <dimensions> for the measurements of an item <p>Encoding subelements within <physdesc> requires additional time and resources. Some institutions in the Virginia Heritage Project have chosen to use these subelements, while others have not. The advantage to more detailed encoding is that it allows for future fine-tuning of searching and display. See the EAD Tag Library and EAD Guidelines for more information about and examples of the use of these subelements in <physdesc>.</p>
	<p></did></p>
<p>NR</p>	<pre><altformavail> <p>information about alternative forms</p> </altformavail></pre> <p>Provides the researcher with information concerning the availability of these materials in other forms such as microfilm or videotape or published transcription.</p> <p><altformavail> may be used at the did-level, or at component levels, or both. If only one or a few items within the collection are available in an alternative form</p>

	<p>(for example, if several letters have been reprinted in a journal article), it is appropriate to use <altformavail> here in the file-level description, but it may not be necessary to use <altformavail> at the did-level also. However, if a significant amount of material is available in alternative forms it may be appropriate to use <altformavail> both for the collection and for the items. For example, a collection of oral history tapes might use <altformavail> at the item level to indicate which tapes have written transcriptions available, but also <altformavail> at the collection level to tell researchers that many of the tapes have been transcribed.</p> <p>This element is comparable to MARC field 530.</p>
NR	<p><scopecontent> <p><i>summary of the item</i></p> </scopecontent></p> <p><scopecontent> notes the nature of the item and/or summarizes its intellectual content. This element may or may not be necessary, depending on how informative the <unittitle> is. It can also be useful to include full or standardized forms of names in <scopecontent> to make them searchable regardless of whether or how the name appears in the <unittitle>.</p> <p>Optionally, an institution may choose to use <abstract> within the <did> instead of <scopecontent>, for display and retrieval reasons.</p> <p>The <arrangement> element is not appropriate for use in item-level description. If the item has an internal arrangement that the researcher should know about, such as an item which is a membership book covering many years but grouped by geographic location instead of date, include the information in <scopecontent>.</p>
NR	<p><bioghist> <p><i>biographical or historical information pertaining to the item</i></p> </bioghist></p> <p>This element is seldom used at the file level, but may occasionally be helpful in providing contextual information for the researcher that is not available from the item itself. (If it comes from the item, the information belongs in <scopecontent>.) Some examples of the use of <bioghist> might be: to explain family connections alluded to in a letter; to explain the presence in personal papers of a catalog from a private school by noting that the person's daughter attended it; to discuss which Civil War skirmishes took place near the home of a woman whose letters comment on foraging soldiers and wounded men.</p>
NR	<p><add></p> <p>The same elements that are available under <add> in the high-level description are technically also available here, in the following order:</p> <p><separatedmaterial> <relatedmaterial></p>

	<pre> <otherfindaid> <bibliography> <fileplan> <index> </pre> <p>However, it is almost impossible to imagine a reason to use any of these elements at the item level, except perhaps for <separatedmaterial> if a repository wishes to document an enclosure removed from a letter, for example, in a more formal way than by mentioning it in <scopecontent>. In EAD version 2002, <add> will not be used; instead, its subelements will be directly available at the component level.</p> <pre> </add> </pre>
	<pre></c01></pre>
	<pre><c01...next file or item...</c01></pre>
	<pre> </dsc> </archdesc> </pre>

Example of typical best-practice item-level description:

```

<c02 level="item"
  <did>
    <unittitle>T. J. ["Stonewall"] Jackson, Lexington, Virginia, to "brother" [Warren Jackson], n.p., <unitdate type="single">1 September 1859</unitdate>
    </unittitle>
    <container label="Box-folder" type="box-folder">3:18</container>
  </did>
  <scopecontent>
    <p> Discusses Anna Morrison Jackson's sickness and search for medical treatment from Dr. Watkins of Prince Edward County, Va.</p>
  </scopecontent>
</c02>

```

J.5. Other forms of <dsc>

Tabular <dsc>

Although a tabular <dsc> exists in EAD, its use is not allowed in the Virginia Heritage Project.

Correspondence lists and "segregated" lists

The OTHERTYPE attribute in the <dsc> is intended to handle descriptive lists other than the series descriptions or container lists already discussed. The OTHERTYPE attribute is selected from a controlled list of other types of analytic description. The following are the

other types currently authorized in EAD. Repositories must submit requests for additional types to the EAD community for discussion. There must be community-wide consensus before new types are added to the list.

Authorized OTHERTYPE values:

correspondence	partial lists of correspondents
segregated	container lists segregated into sections (using nested <dsc>s). Note: “segregated lists” are lists that are divided into two or more sections and the division is not based on an intellectual analysis.

While these values are available for Virginia Heritage Project participants, their use should be rare.

CHAPTER IV

IV. General Encoding Instructions

A. Block and Inline Elements

For formatting purposes, all elements in <ead> that are intended for display can be classified as either “block” or “inline” elements. “Block” and “inline” describe display characteristics.

Block elements are characterized by having a linebreak before and after them (and sometimes additional space) to separate them from the elements that precede and follow them. For example, all of the did-level elements when they occur directly within the <archdesc> are separated from one another by linebreaks and spacing. <head> elements are always treated as block elements, in order that each occupies its own line.

Inline elements are characterized by not having linebreaks before and after them, that is, they occur “inline” with text and elements that precede and follow them. For example, most of the elements within <p> are displayed inline. Note that some elements may be treated as inline or block, depending upon the element which contains them. For example, <persname>, when it occurs inside of a <p> is treated as an inline element, but when it occurs directly inside <controlaccess>, it is treated as a block element in order that the controlled access headings can be displayed as a list. Understanding the contexts when elements are inline and block has important implications for word spacing.

Word Spacing and Inline Elements

For all inline elements within block elements, spacing may be supplied either within the preceding element or following the element with two exceptions: when using the <emph> and <title> elements with the RENDER attribute set to “quoted”, always place the space separating the word from the word that follows after the <emph> or <title> element. (<title> is always an inline element.)

B. Attribute Values

When supplying attribute values, always surround the value with **double quotation** marks (“*value or values*”). When using SGML authoring software, the double quotation marks are usually supplied automatically.

Emphasis <emph> and Titles <title>

Both the <emph> and <title> elements have a RENDER attribute with a controlled list of styles. To facilitate economic encoding, all <emph> will be rendered as bold and <title> elements will rendered as italic when the RENDER attribute is not set to a specific value.

The RENDER attribute values are given in the following list:

- altrender
- bold [implied for <emph>]

- bolditalic
- boldquoted
- boldsmcaps
- boldunderline
- italic [implied for <title>]
- nonproport
- quoted [use keyboard double quotes (“”)]
- smcaps
- sub
- super
- underline

Quoted titles

It is highly recommended that quoted titles are encoded using <title render=“quoted”> to facilitate searching of titles. Note: If the encoded text has double quotes (“”) in the text, they will need to be removed, otherwise it will lead to two sets of quotes around the title. Search and replace can be used to accomplish this, if done carefully.

C. Names, Topics, and Dates

Names, topics, and dates are to be encoded where specified in these guidelines. More detailed tagging of names, topics, and dates is at the discretion of individual repositories. Both tagging and content of the EAD document can be designed to assist a user in searching the document for names, topics, and dates, if time and resources permit. Each institution will determine its own policy on how much extra effort is appropriate to improve search capability.

Tagged access points

As discussed in Chapter III, section I, <controlaccess> may optionally be used for the most significant access points. This ensures that the most significant names and topics in the collection are clearly presented up front, in standardized form. For institutions that have catalog records for archival and manuscript collections, the terms in <controlaccess> are usually the same as those in the 6xx and 7xx MARC fields in the catalog record.

Example:

```
<persname encodinganalog="600" source="lcnaf">Reimann, Lewis Charles, 1909-1978.</persname>
```

It is also possible to use the <persname>, <famname>, and other such tags outside the <controlaccess> section. However, as yet there is no consensus among EAD practitioners on such usage, and in most cases no clear benefit to doing so. If you are concerned about providing access points at the series level, or to a single extremely important letter within a collection, the issue can generally be addressed by making sure the standardized name or term occurs in the text of the scope note.

Full-text searching

One of the advantages of having finding aids in electronic format is that users can do a full-text search of the finding aid for the name or word they are looking for. However, a lack of uniformity in names, partial names, or abbreviations will prevent a full-text search from locating everything the user wants. How can the user do a full-text search for correspondence with Richard Cunningham if the inventory lists letters to and from “Richard Cunningham,” “Richd. Cunningham,” “Cousin Richard”, and “R. W. Cunningham”? One choice is to write the inventory using a standard form of name throughout. If your repository wants to preserve the exact headings on the letters, one possibility is to put the standardized form in parentheses or brackets. (Be aware that the Virginia Heritage Project search engine will ignore parentheses as punctuation, but will not ignore square brackets. If you use square brackets, make sure the complete search term is within the brackets.)

```
<unittitle>Martha Carson to Cousin Richard (Cunningham), <unitdate>13 March
1811.</unitdate> </unittitle>
```

```
<unittitle>Martha Carson to Cousin Richard [Richard Cunningham], <unitdate>13 March
1811.</unitdate> </unittitle>
```

If adding text in parentheses or brackets seems to make the inventory too repetitious to display well, another possibility is to use the <abbr> tag to expand the name to its standardized form:

```
<unittitle>Martha Carson to <abbr expan="Richard Cunningham">Cousin Richard</abbr>,
<unitdate>13 March 1811</unitdate></unittitle>
```

This letter would show up as a hit in a search for Richard Cunningham, but the user would only see the title as

```
Martha Carson to Cousin Richard, 13 March 1811
```

This option requires the most effort to encode, but allows the most control over both search terms and display.

For names which are found throughout the collection, such as the records creator, there’s no reason to worry about full-text search capability. If the whole collection concerns this person, users don’t need to do a search within the finding aid for the person—they just need to read over the complete inventory. Therefore there’s no need to spend time standardizing this person’s name at the file or item level.

If you think there is any chance that users might want to do a full-text search for geographic locations, be sure the state name and abbreviations such as Co. (for county) are spelled out in full. Likewise, if the collection is arranged chronologically, and you think there is any chance that users might want to search for November 1855, make sure November is not Nov. or Novr.

D. List <list>

In EAD, <list> can be used in four ways, each use being specified in the TYPE attribute according to one of the following values:

- “simple” = list of words or phrases
- “deflist” = definition list: list of labels paired with words or phrases
- “marked” = list with a bullet
- “ordered” = enumerated or alphabetically arranged list of words or phrases

The Virginia Heritage Project does not currently support “marked” and “ordered” lists.

Template for Simple List

```
<list type="simple">
  <head>Optional head for list</head>
  <item>Word or phrase</item>
  <item>Word or phrase</item>
  <item>Word or phrase</item>
  <item>Word or phrase</item>
</list>
```

Template for Definition List

```
<list type="deflist">
  <head>Optional head for list</head>
  <listhead>
    <head01>Heading for column 1</head01>
    <head02>Heading for column 2</head02>
  </listhead>
  <defitem>
    <label>Word or phrase in column 1</label>
    <item>Word or phrase in column 2</item>
  </defitem>
  <defitem>
    <label>Word or phrase in column 1</label>
    <item>Word or phrase in column 2</item>
  </defitem>
</list>
```

E. Note <note>

Use of the <note> element is strongly discouraged. The <note> element should only be used as follows:

- Notes about the finding aid, as opposed to information describing the archival material. Typically these notes will be intended for internal use only, and when so used, set the AUDIENCE attribute to “internal”. Structurally, all displayed <note>s are treated as block elements.

- `<note>` should only be used to wrap archival description (as opposed to annotations about the text or internal control notes not intended for the public) in the top level `<did>` (directly in the `<archdesc>`), e.g., for information that is not logically contained in another element in the `<did>`. When used in the top level `<did>`, use the LABEL attribute to supply a label or head for the descriptive information given in the note. Use of `<note>` in the `<did>` should be limited.
- Do not use `<note>` in `<c01>...<c12>` except for annotations or internal control notes. Use instead the appropriate descriptive element, e.g. `<scopecontent>`, or when the information is mixed or ambiguous, use `<odd>`.

CHAPTER V

V. Hypertext and Hypermedia

A. References and Pointers

References and pointer elements are used to refer or point from one place in a finding aid to another place in the same finding aid, or to point from a finding aid to another finding aid, or to a related text or graphic file. The internal reference and pointing elements are `<ref>` and `<ptr>`. The external reference and pointing elements are `<dao>` and `<daoloc>`, `<extref>`, `<extptr>`, `<archref>`, `<bibref>`, and `<title>`. The Virginia Heritage Project is not currently using external references in `<archref>`, `<bibref>`, or `<title>`.

The pointer elements `<ptr>` and `<extptr>` cannot contain text; they simply indicate that a link is to be made from the location of the element to a location indicated in an attribute. Pointer elements are represented by a hyperlinked icon.

The `<dao>` is a pointer element. It cannot contain text directly, though it can contain the `<daodesc>` element, which can contain text. The `<daodesc>` element, though, is intended to contain a text description of a graphic image for the visually impaired.

The reference elements may contain text and subelements. The text in the reference element is used to identify the referenced object. The text in the reference element will be highlighted if there is an active hypertext link.

All internal and external references and pointers share the attributes ACTUATE and SHOW. There are two possible values for ACTUATE:

- auto
- user

This attribute must be set to “auto” for references that the author wants displayed automatically; and to “user” for references that will be represented by an icon or thumbnail image.

There are three possible values for SHOW:

- embed
- new
- replace

This attribute must be set to “embed” for references that appear at the point of the link, to “new” for references that appear in a new window, and to “replace” for references which replace the local resource which initiated the link.

B. Internal References and Pointers

Internal references and pointers use formal SGML features to accomplish identifying the target of a link and the TARGET attribute on the `<ptr>` or `<ref>` element to refer to the target. The attribute for identifying the target of a link is the ID attribute. Almost all elements in `<ead>` have an optional ID attribute. A value unique to each element must be

used as the ID for an element that is to serve as a target. The SGML parser will enforce the uniqueness of the value; if more than one element has the same ID value, a warning message will be given when the <ead> instance is parsed. The TARGET attribute on the <ptr> or <ref> element will use the same value as the ID on the targeted element. The SGML parser will check to make sure all TARGET attribute values resolve to an ID in a targeted element; if there is no corresponding ID attribute on an element, a warning message will be given at the time an <ead> instance is parsed.

Example:

```
<p id="p1">This is the target of a pointer or reference.</p>
```

A target paragraph may be created at any place in the finding aid where a paragraph is allowed to occur.

```
<ptr target="p1">
```

An icon will appear that will take the user to the targeted paragraph when clicked.

```
<ref target="p1">This is a textual reference to the targeted paragraph.</ref>
```

The text will be highlighted and will take the user to the targeted paragraph when clicked.

C. External References and Pointers

The external reference and pointing elements are <dao> and <daoloc>, <extptr>, <extref>, <archref>, <bibref>, and <title>. The Virginia Heritage Project is not currently using external references in <archref>, <bibref>, or <title>.

The external and pointing elements employ formal SGML features. Reference and pointer elements can be used to link the researcher to an external digital object. Alternatively, reference elements can be used just to refer to external objects intellectually, which is to say, by presenting descriptive text that identifies and perhaps describes an external object. In order to link to external digital objects, such as text, images (including images of text), sound files, etc., the objects must be declared in the declaration subset of the <ead> instance. Please see Chapter VI, Naming and Declaring Referenced External Entities, for instructions concerning the declaration of different types of entities. To reference a declared entity using an external pointer or reference, supply the Entity Name in the declaration in the ENTITYREF attribute of the pointer or reference.

Example:

Declaration:

```
<!ENTITY Ratesoftollage SYSTEM
http://www.swem.wm.edu/SpColl/RBMss/Cocke/Rates_of_tollage.jpg" NDATA jpeg>
```

Element:

```
<dao actuate="user" show="new" title="Rates of Tollage" entityref="Ratesoftollage">
```

Digital Archival Objects <dao> and <daogrp>

The <dao> is a special form of external reference that is to be used exclusively for referencing digital representations of archival materials. Such externally referenced objects must be declared in the declaration subset of the EAD instance, as discussed in Chapter VI. In the Virginia Heritage Project, the image files are stored on the repository's own servers. Image files will not be housed on the University of Virginia servers where the EAD files are stored.

<dao> may only be used in <archdesc>, and then only within constrained environments. Currently <dao> and <daogrp> are being used exclusively within the <c0#>s in the Virginia Heritage Project.

Use <unittitle> to encode caption information instead of <daodesc>. <daodesc> is intended to be used to encode visual descriptions of the images to be used by the vision-impaired. Caption information that differentiates multiple images, such as "Page 2" or "Detail", may optionally be placed in the TITLE attribute in <daoloc>.

Many repositories prefer to include a thumbnail image, which will appear inline, in addition to the viewing file itself. With this approach, at least two files will represent each archival object: a file containing the thumbnail, and a file containing the viewing file. Some repositories may even choose to create a third file, containing a higher-resolution version of the viewing image. When such multiple resolutions of the viewing files are used, encode each resolution using a separate <daoloc> element within a parent <daogrp>. Do not use <dao>. Additionally include an <!ENTITY> declaration for each resolution of the viewing file within the DTD subset at the beginning of the finding aid.

Also use <daogrp> instead of <dao> to reference several different images at the same place in the finding aid (for example, to include digital images of the four pages of a letter).

Sample template for a single image

```
<c03 level="[file] OR [item]">
  <did>
    <unittitle>title of file or item, <unitdate type="[inclusive] OR [bulk]
OR [single]">Date or date range</unitdate></unittitle>
    <container label="Box-folder or other choice" type="box-folder or other
choice">container or range of containers</container>
    <dao show="embed" actuate="auto"
entityref="Image_entity_name">
  </did>
  ...rest of file or item description...
</c03>
```

Sample template for multiple resolutions of an image

```
<c03 level="[file] OR [item]">
  <did>
```

```

    <unittitle>title of file or item, <unitdate type="[inclusive] OR [bulk]
OR [single]">Date or date range</unitdate></unittitle>
    <container label="Box-folder or other choice" type="box-folder or other
choice">container or range of containers</container>
    <daogrp>
        <daoloc show="embed" actuate="auto"
entityref="Thumbnail_entity_name" role="thumbnail">
        </daoloc>
        <daoloc show="new" actuate="user"
entityref="Medium_resolution_entity_name" role="med-res">
        </daoloc>
        <daoloc show="new" actuate="user"
entityref="High_resolution_entity_name" role="hi-res">
        </daoloc>
    </daogrp>
</did>
...rest of file or item description...
</c03>

```

Sample template for multiple images attached to an item

```

<c02 level="item">
    <did>
        <unittitle>title of item, <unitdate type="single">Date</unitdate>
        </unittitle>
        <container label="Box-folder" type="box-folder">container
        </container>
        <daogrp>
            <daoloc show="new" actuate="user" title="Page 1"
entityref="First_page_of_letter_entity_name">
            </daoloc>
            <daoloc show="new" actuate="user" title="Page 2"
entityref="Second_page_of_letter_entity_name">
            </daoloc>
            <daoloc show="new" actuate="user" title="Page 3"
entityref="Third_page_of_letter_entity_name">
            </daoloc>
        </daogrp>
    </did>
    ...rest of item description...
</c02>

```

Other external references <extref>

The <extref> element is used to link to an electronic object that is external to the EAD document, such as another website. It is treated as an inline element.

CHAPTER VI

VI. Naming and Declaring Referenced External Entities

A variety of external entities may be referenced from within an <ead> encoded finding aid. The following are typical examples: another <ead> encoded finding aid for a related collection; a repository seal on the title page; graphics and sound files for illustrating the history of an agency or the biography of an individual; and digital representations of primary resource material themselves.

These external entities fall into two basic categories: (1) general entities referenced by more than one finding aid; and (2) entities referenced by individual finding aids. All external entities must be correctly named and must be declared in the Declaration Subset at the beginning of each encoded finding aid. The Virginia Heritage Project uses SGML System identifiers to name external entities. Responsibility for naming, declaring, and referencing entities differs for the two categories.

A. Naming and Declaring General Entities

Some general entities are referenced by many finding aids. For example, the union statement on conditions of use is referenced by the finding aids contributed by all Virginia Heritage repositories. Each institution's seal, which appears on the title page of its finding aids, is an external entity referenced by all finding aids contributed by a single repository. These institution-specific entities are created when an institution joins the Virginia Heritage Project.

Responsibility for naming and maintaining general entities that are referenced by many finding aids is the responsibility of the University of Virginia.

External entities referenced by finding aids must be declared in the Declaration Subset of each encoded finding aid. The Declaration Subset of an EAD document is an area delimited by square brackets and located within the DOCTYPE declaration. The DOCTYPE declaration immediately precedes the encoded document itself. The declaration for general entities that appear in all of a repository's finding aids (for example, the institutional seal, the conditions of use statement, and the text files for the address and contact information on the title page) are included in the MU form template for the repository. The following example shows a typical Declaration Subset for a finding aid in the Virginia Heritage Project, with entity declarations automatically created by the MU form.

```
<!DOCTYPE ead SYSTEM "http://ead.lib.virginia.edu/bin/dtd/vivaead/ead.dtd" [
  <!ENTITY % notats SYSTEM "http://ead.lib.virginia.edu/bin/dtd/vivaead/eadnotat.ent"> % notats;
  <!ENTITY logo SYSTEM "http://ead.lib.virginia.edu/vivaead/logos/uva-sc.jpg" NDATA jpeg>
  <!ENTITY conditions SYSTEM "http://www.lib.virginia.edu/speccol/vhp/conditions.html" NDATA
    html>
  <!ENTITY address SYSTEM "http://ead.lib.virginia.edu/vivaead/add_con/uva-sc_address.xml">
  <!ENTITY contact SYSTEM "http://ead.lib.virginia.edu/vivaead/add_con/uva-sc_contact.xml">
]> <ead>...</ead>
```

B. Naming and Declaring Entities Referenced by Individual Finding Aids

Responsibility for naming and maintaining all external entities referenced exclusively in an individual finding aid will reside with the owner of the referenced entity, which is normally the repository contributing the finding aid. When deciding to reference external entities in a finding aid, keep in mind that the external entity's file must be maintained at its specified location so long as the finding aid exists online. If the external entity is moved or deleted in the future, the reference and the declaration in the finding aid must be edited.

Each external entity referenced in a finding aid must be declared in the Declaration Subset of the encoded finding aid. Declarations for <dao>s and other external entities referenced by individual finding aids must be added to the declarations in the Declaration Subset in the template. Adding these declarations is the responsibility of the repository contributing the finding aid.

Declarations

A declaration for a non-general external entity normally consists of the following components, in the order given:

<!ENTITY <i>entity name</i>	The entity name is used in the ENTITYREF attribute of the reference or pointer within the finding aid, as discussed in Chapter V.										
SYSTEM " <i>entity's URL</i> "	All external entity declarations must use a fully-qualified URL. The URL is enclosed by quotation marks.										
NDATA <i>format type</i> >	<p>NDATA specifies the format of the external entity if it is not SGML or XML. The following format types may be specified in an EAD document:</p> <table data-bbox="678 1310 1045 1499"> <tr> <td>email</td> <td>mpeg1aud</td> </tr> <tr> <td>eps</td> <td>mpeg1vid</td> </tr> <tr> <td>gif</td> <td>pict</td> </tr> <tr> <td>html</td> <td>pcx</td> </tr> <tr> <td>jpeg</td> <td>tiff</td> </tr> </table> <p>For an SGML or XML entity, do not use NDATA. In these cases, the declaration will look like:</p> <pre data-bbox="623 1612 1279 1646"><!ENTITY <i>entity name</i> SYSTEM "<i>http://.../filename.xml</i>"></pre>	email	mpeg1aud	eps	mpeg1vid	gif	pict	html	pcx	jpeg	tiff
email	mpeg1aud										
eps	mpeg1vid										
gif	pict										
html	pcx										
jpeg	tiff										

The following example shows the declarations for digital images of two pages of a letter, along with the reference element for the images which is in the component element where the letter is described in the finding aid.

Example of declarations:

```
<!ENTITY cabiniss-p1 SYSTEM "http://www.library.vcu.edu/tml/speccoll/docs/cabinissletter-p1.jpg"
  NDATA jpeg>
<!ENTITY cabiniss-p2 SYSTEM "http://www.library.vcu.edu/tml/speccoll/docs/cabinissletter-p2.jpg"
  NDATA jpeg>
```

Example of reference element:

```
<daogrp>
  <daoloc show="new" actuate="user" title="Page 1" entityref="cabiniss-p1"> </daoloc>
  <daoloc show="new" actuate="user" title="Page 2" entityref="cabiniss-p2"> </daoloc>
</daogrp>
```

Declaration Subset

The Declaration Subset of an EAD document is an area delimited by square brackets ([]) and located within the DOCTYPE declaration. The DOCTYPE declaration immediately precedes the encoded document itself: <ead> ... </ead>.

```
<!DOCTYPE ead SYSTEM "http://ead.lib.virginia.edu/bin/dtd/vivaead/ead.dtd" [Declaration
Subset Area]> <ead> ... </ead>
```

In the following Declaration Subset, the last two entities are digital objects referenced within the <dsc> in the finding aid. The encoder has added them to the declarations that were automatically generated by the MU form template.

```
<!DOCTYPE ead SYSTEM "http://ead.lib.virginia.edu/bin/dtd/vivaead/ead.dtd" [
<!ENTITY % notats SYSTEM "http://ead.lib.virginia.edu/bin/dtd/vivaead/eadnotat.ent"> % notats;
<!ENTITY logo SYSTEM "http://ead.lib.virginia.edu/vivaead/logos/wm.jpg" NDATA jpeg>
<!ENTITY conditions SYSTEM "http://www.lib.virginia.edu/speccol/vhp/conditions.html" NDATA
  html>
<!ENTITY address SYSTEM "http://ead.lib.virginia.edu/vivaead/add_con/wm_address.xml">
<!ENTITY contact SYSTEM "http://ead.lib.virginia.edu/vivaead/add_con/wm_contact.xml">
<!ENTITY martha SYSTEM "http://www.swem.wm.edu/spcoll/Barksdale/Martha11.gif" NDATA gif>
<!ENTITY DiaryWebsite SYSTEM "http://www.swem.wm.edu/spcoll/Barksdale/Diary.htm" NDATA
  html>
]>
<ead>...</ead>
```