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Abstract (for dissemination)	This document addresses the role of standards as a means to facilitate the integration of heterogeneous sources in the context of the EHRI project. More precisely the problem at hand is to combine data coming from a network of archives in order to create an interoperable data environment where it is possible to search, retrieve and disseminate its content in the general of archival based research. The scholarly purpose has specific consequences for our task. First, it presupposes that the information made available to the researcher is as close as possible to the originating source in order to guarantee that the ensuing analysis can be judged reliable. Second, it is important to be able to quote any source of information that has been used for a given analysis, which implies the data sets are properly traced and second that anyone can refer back to it by means of a stable and univocal referring mechanism.
Management Summary	This document describes mechanisms where interoperability of data is ensured with the use of standards. The standards we covered are both domain related, the archival standards in XML formats such as EAD, EAC-CPF and EAG, and transversal standards, whose use is recommended in the context of any digital project, in particular the ISO standards for the representation of language, script and countries. Interoperability of archival descriptions expressed in EAD is made possible with the specification of a specific EAD profile for EHRI. This profile is built and maintained using the TEI-ODD framework,

	which is explained of the first section of the report. Interoperability and reusability of EHRI resources is also ensured with the design of more consistent URLs, composed with standardised methods and using ISO reference codes. This design has to be seen as a first step through a persistent identifier system. The work initiated in WP11 and presented in this document will be continued, enhanced and developed by other EHRI work packages, WP7 Virtual Access to EHRI Virtual Observatory, WP10 Resource Identification and Integration Workflows and WP13 Research Data Infrastructures for Holocaust Material.

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1 Introduction

This document addresses the role of standards as a means to facilitate the integration of heterogeneous sources in the context of the EHRI project. More precisely the problem at hand is to combine data coming from a network of archives in order to create an interoperable data environment where it is possible to search, retrieve and disseminate its content in the general of archival based research. The scholarly purpose has specific consequences on our task. First, it presupposes that the information made available to the researcher is as close as possible to the originating source in order to guarantee that the ensuing analysis can be judged reliable. Second, it is important to be able to quote any source of information that has been used for a given analysis, which implies the data sets are properly traced and second that anyone can refer back to it by means of a stable and univocal referring mechanism.
In the EHRI network of archives, as already observed in the EU Cendari project before, one cannot but face heterogeneity by nature. EHRI's mission is to support Holocaust research by providing online access to information on dispersed sources relating to the Holocaust through its online portal (http://portal.ehri-project.eu). This portal puts together descriptions from more than 1900 institutions. Each archive comes with a whole range of idiosyncrasies corresponding to the way they have been set up and have evolved over time. Cataloging practices may differ. Even the degree of digitization may range from the absence of a digital catalogue to the provision of a full fledged online catalogue with all the necessary APIs for anyone to query and extract content. There is indeed a contrast here with the global endeavour at international level to develop and promote standards for the description of archival content at large.

Still in a project like EHRI, standards should play a central role. They are necessary for many tasks related to the integration and exploitation of the aggregated content, namely:

- The possibility to compare the content of the various sources, thus being able to develop quality-checking processes;
- The definition of an integrated repository infrastructure where the content of the various archival sources can be reliably hosted;
- The capacity to query and re-use content in a seamless way;
- The deployment of tools that have been developed independently of the specificities of the information sources, for instance in order to visualise or mine the resulting pool of information.

One central aspect of the work described in this document is the assessment of the role of the EAD (Encoded Archival Description) standard as the basis for achieving the tasks described above.The development of EAD was initiated in 1993 at the Library of Berkeley, with the idea of building a non proprietary format for finding aids, reflecting the hierarchical structuration of archival fonds. If preliminary attempts were expressed in SGML, the first version of EAD used XML, and was released in 1998. A second version were soon released in 2002, EAD2002, which is still widely used. It is maintained by the Library of Congress and the Society of American Archivists. In 2010, a global revision process was initiated, in order

to make EAD more connected to the Linked Data technologies, and to reach a better integration with the others XML archival formats: EAC-CPF and EAG.
Still, we have tried to go further then the simple application of one or the other version of EAD, we have devised how we could have a real strategy of defining specific customisation of EAD that could be used at various stages of the process of integrating heterogeneous sources. While doing so, we have developed a methodology based on a specification and customisation method inspired from the long lasting experience of the Text Encoding Initiative (TEI) community. In the TEI framework, as we show in Section 2.1, one has the possibility of model specific subset or extensions of the TEI guidelines while maintaining both the technical (XML

schemas) and editorial (documentation) content within a single framework. This work has lead us quite far in anticipating that the method we have developed may be of a wider interest within similar environments, but also, as we imagine it, for the future maintenance of the EAD standard.

Finally this work can be seen as part of the wider endeavour of research infrastructures in the humanities such as CLARIN and DARIAH to provide support for researchers to integrate the use of standards in their scholarly practices. This is the reason why the general workflow studied here has been introduced as a use case in the umbrella infrastructure project Parthenos which aims, among other things, at disseminating information and resources about methodological and technical standards in the humanities.

2 EHRI-EAD: Contribution to the mapping and the validation of archival descriptions

2.1 Customizing and maintaining EAD with TEI-ODD[1]

2.1.1 EAD maintenance issues

Developing international consensus on a standard for archival description is a daunting challenge. Cultural differences and established and differing theories and practices are at the core of the challenge. [EGAD ICA, 2016]

The challenge expressed by the Experts group on archival description has been tackled since 1993 with the development of the Encoded Archival Description (EAD) [Library of Congress, 2013, which has successfully developed a standard format usable by a wide range of archives and archivists worldwide, making possible the transcription of printed finding aids, as welle as the description of archival records according to diverging national or institutional practices. However, the limit of such an approach is that EAD is a very permissive standard, where each institution (each archivist), and each piece of software can have their own way of creating EAD, and the same material can be described in totally different ways. The first example that comes in mind to the choice to let the archivist use <c> or <c01>, <c02>, ... to describe sub-components. Documenting guidelines used by an institution, or a group of institutions, or in a particular context (a thematic portal for example). Therefore, it is important to document specific guidelines by institutions or from specific contexts.
The agencies responsible for the maintenance of archival standards developed several important initiatives in order to gain interoperability. EAD3, developed by the Library of Congress[2] and the Society of American Archivists[3] with the cooperation of many archivists worldwide, is a big step towards interoperability even though many archives consider the change towards EAD3 as a mid-term perspective. On the other hand, since 2012, the International Council on Archives is building the content model *Records in Context*, a descriptive standard that reconciles, integrates, and builds on its four existing standards: General International Standard Archival Description (ISAD(G)), International Standard Archival Authority Records - Corporate Bodies, Persons, and Families (ISAAR(CPF)), International Standard for Describing Functions (ISDF) and International Standard for Describing Institutions with Archival Holdings (ISDIAH). This initiative will also contribute to provide a solid framework for exchanging archival data more easily.
The maintenance issue of EAD, assumed by the Society of American Archivists and the Library of Congress, is still a big issue. The maintenance of a standard requires in any case discussions to achieve consensus, and any major revision should undergo a precise and

[1] for clarification purposes, the code samples presented in this article come with prefixes : "rng" for RelaxNG elements, "tei" for TEI(ODD) and "ead" for EAD.
[2] http://www.loc.gov/ead/
[3] http://www2.archivists.org/groups/technical-subcommittee-on-encoded-archival-description-ead/encoded-archival-description-ead

complete process, but some little corrections and adjustments are sometimes welcome in the meantime. Between EAD 2002 and EAD3, more than ten years passed and some features introduced in 2015 had been requested by the community many years before, even minor changes. For example, some users asked for a typing attribute for the <ead:addressline> element, a child of <ead:address> [EAD working group AFNOR]. This small modification was introduced in EAD3, as a part of the general revision process, that lasted five years. Maybe we could imagine a smoother evolution of the standard, based on continuous maintenance, on the model of the TEI consortium that updates its standard continuously on GitHub. In this respect, the fact that the development of EAD3 took actually place on GitHub opens the way to this more continuous maintenance.

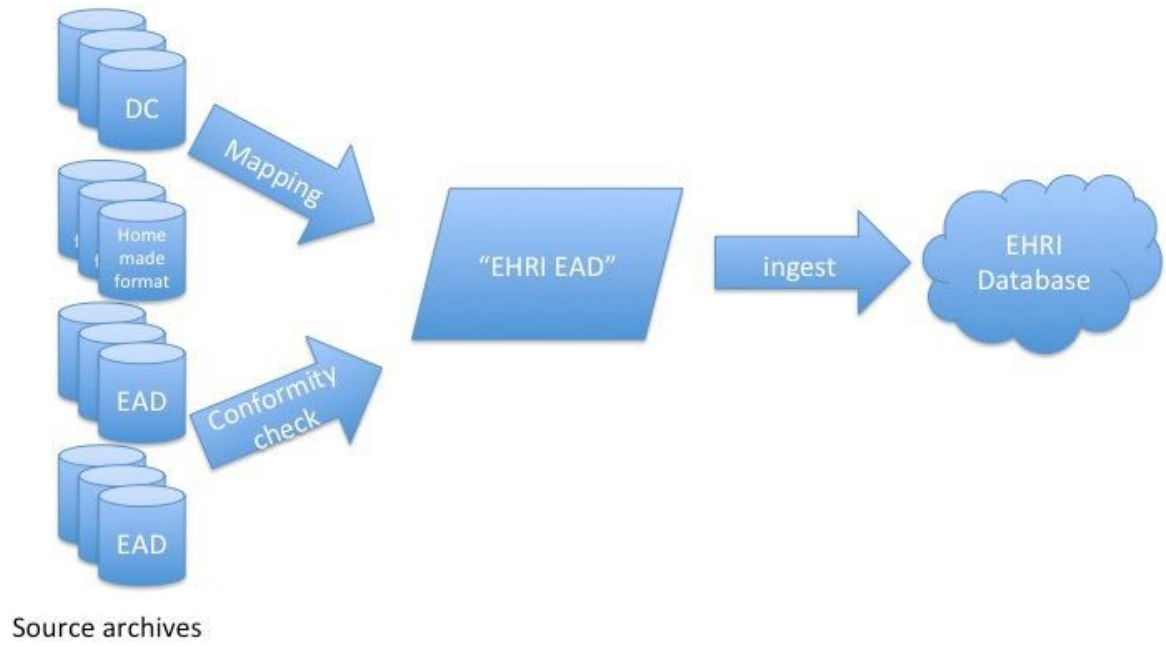
2.1.2 Archive portals and EAD: use cases

The experience gained from concrete use cases showed how strong the need is to build interoperability solutions between heterogeneous archival descriptions in EAD.
The Archives Portal Europe project (https://www.archivesportaleurope.net/) gathers archival descriptions from all the European countries and has made a first effort to implement common European profiles of EAD, EAC-CPF (Encoded Archival Context – Corporate Bodies, Persons and Families), EAG (Encoded Archival Guide) and METS (Metadata Encoding and Transmission Standard). Specific schemas were created, in particular apeEAD, a subset of EAD2002, which "was drafted on the basis of a comparison of EAD profiles and practices of the National Archives participating in the project"[4].
European funded research infrastructures tackled this issue of interoperability of archival descriptions as well, with an additional focus on specific research communities, with specific needs.
Within the context of two H2020 Research infrastructures projects which work with archival data, EHRI and Cendari (Collaborative European Digital Archival Research Infrastructure)[5] , different solutions were proposed. In the Cendaris virtual research environment, where researchers have the possibility to select descriptions originating from various sources and create their own collections, EAD was customized with the addition of elements dedicated to the researchers uses. For instance, it was important to give access to a more complex structuration of bibliographic sources [Medves, Romary, 2013].

For the EHRI project, on which we will focus, the problem is slightly different. Researchers are not (yet) allowed to create their own descriptions, but the heterogeneity of the archival descriptions which have to be collected in a single pool, and processed uniformly, make it necessary to create a straightforward workflow for the ingestion of archival data in the portal database. EHRI coordinates the activity of 24 institutions (among which research bodies, archives, libraries, …), but its archival portal hosts descriptions from 1 922 institutions. An extra challenge for EHRI is that Holocaust archives are hidden, often dispersed in several institutions or several fonds. Moreover, EHRI wants to focus on Eastern Europe, where few archives are digitally advanced, due to the lack of funding or technical infrastructures. These

[4] http://apex-project.eu/index.php/en/outcomes/standards/apeead
[5] cendari.eu

descriptions can be manually entered by EHRI staff, but the preferred method is semi-automatic ingestion of XML files in the database. Due to the variety of institutions providing data, EHRI has to deal with a great heterogeneity of data formats and of EAD flavours. EHRI uses EAD2002 since the beginning of the project in 2011. In 2015, a discussion arose about the opportunity to move towards EAD3, that was just released, but the lack of visibility on its spread in the archival community during the four years of the project made this choice too risky.
The use of EAD in EHRI takes place at the two sides of the workflow: the ingestion and the export of archival descriptions. EAD2002 is the pivot format for semi-automatically ingestion of data in EHRI database, which is build with GraphDB, its data model is based on the ICA standards – ISAD(G) and ISAAR-CPF, combined with extra administration fields. It is also used as an exchange format, with the ability given to the users of the portal to download any content of the portal in XML-EAD (or EAC and EAG for authorities and institutions). Therefore, there is a strong need for both valid and customized EAD (and EAC-CPF) schemes, for two kind of tasks : The first one is the possible mapping of the data to XML-EAD if the descriptions are not provided in this format. The second one is a validity check to be sure the EAD is in conformity with EHRI requirements.



The scheme above present the workflow of archival data in the EHRI portal. The archival materials provided by the institutions can be processed in two different ways. If they are not described in EAD2002, they are directly mapped to the customized EHRI EAD format. If they are in EAD2002, we automatically check if the EAD flavour in input is compatible with the

customized EHRI EAD format. If some adjustments are necessary, they can either be made by the provider himself of by the same EHRI mapping mechanism mentioned before. Then, the formatted XML document can be processed again in order to populate EHRI database.

2.1.3 Project-oriented EAD schemas with TEI-ODD

There are several methods to create project-oriented schemas. The most immediately obvious method is to modify the DTD or the schema by hand to narrow down the possibilities in a given context. This solution is however rejected because it is too restrictive and creates other complications: It's harder to keep the history of changes, and schema validation errors provide a technical message, but not an archivist oriented message.
The solution we propose is based on a flexible and customizable methodology : It combines the complete description of the specifications in a machine-readable way, and customization facilities, easy to understand for the end-user. More important, this solution doesn't change the core EAD schema, but add more specific rules in a comprehensive and human-readable format, by combining the EAD schema (expressed in RelaxNG) with ISO Schematron rules. Schematron is an ISO/IEC Standard (ISO/IEC 19757-3:2016) that parses XML documents and makes "assertions about the presence or absence of patterns"[6]. It can be used in conjunction with a lot of grammar languages such as DTD, relaxNG, …
In our case, this combination is made using the Text Encoding Initiative (TEI). This format is broadly recognized as the *de facto* standard for the representation of text in digital form, but TEI can be used to represent almost any digital resource. For instance, the TEI XML schema and the associated guidelines are maintained with the TEI format, more precisely, with a subset called "One Document Does it all" (ODD) which, as the name indicates, is a description language that "includes the schema fragments, prose documentation, and reference documentation [...] in a single document"[7], based on the principles of literate programming. Literate programming is a programming and documentation methodology whose "central tenet is that documentation is more important than source code and should be the focus of a programmer's activity"[Walsh 2002]. With ODD, semantic and structural consistency is ensured as we encode and document best practices in both machine and human-readable format. ODD was created at first to give TEI users a straightforward way to customize the TEI schema according to their own practices and document this customization. But it is possible to describe a schema and the associated documentation of any XML format. More, if ODD is a description language, it can be processed to generate an actual schema (a DTD, an RelaxNG XML or compact schema and an XML schema), and documentation in various formats (XHTML, PDF, EPUB, docx, odt). We used ODD to encode completely the EAD standard, as well as the guidelines provided by the Library of Congress[8].

[6] http://www.schematron.com/, accessed on November 2d, 2016.
[7] http://www.tei-c.org/Guidelines/Customization/odds.xml
[8] http://loc.gov/ead

2.2 The EAD specification in ODD9

2.2.1 The ODD syntax

The EAD ODD is a XML-TEI document made up of three main parts. The first one is, like any other TEI document, the <tei:teiHeader>, that comprises the metadata of the specification document. Here we state, among others pieces of information, the sources used to create the specification document in a <tei:sourceDesc> element. Our two sources are the EAD Tag Library[10] and the RelaxNG XML schema[11], both published on the Library of Congress website. The second part of the document is a presentation of our method (the foreword) with an introduction to the EAD standard and a description of the structure of the document. This part contains some text extracted from the introduction of the EAD Tag Library.
The third part is the schema specification itself : the list of EAD elements and attributes and the way they relate to each others. The most important elements to understand the way ODD works are the following:

- Schema specification : <tei:schemaSpec>

The top-level ODD element is <tei:schemaSpec>. Its attributes are @start, which state "which patterns may be used as the root of documents conforming to it"[12] and @ns, for the namespace of the document.

- Element specification: <tei:elementSpec>

Each EAD element in described in a <tei:elementSpec> element, where the encoded information combines the element documentation in textual and machine interpretable form. These element declarations are connected to classes declarations. In TEI, elements are members of one or more classes.

- Class specification: <tei:classSpec>

A class is "a group of elements which appear together in content models, or which share some common attribute, or both"[13]. Classes are defined by the <tei:classSpec> element.

[9] The EAD guidelines and schema encoded with ODD can be found here: https://github.com/ParthenosWP4/standardsLibrary/blob/master/archivalDescription/EAD/odd/EADSpec.xml, accessed on March 28th, 2017
[10] http://www.loc.gov/ead/tglib/index.html
[11] http://www.loc.gov/ead/ead.rng
[12] TEI Guidelines Version 3.1.0, element schemaSpec (schema specification), http://www.tei-c.org/release/doc/tei-p5-doc/en/html/ref-schemaSpec.html (accessed on January 12th, 2017)
[13] TEI Guidelines Version 3.1.0, element classSpec (class specification), http://www.tei-c.org/release/doc/tei-p5-doc/en/html/ref-classSpec.html (accessed on January 12th, 2017)

In our ODD specification, we encoded as classes the modules defined in the EAD RelaxNG schema. But RelaxNG modules and TEI classes enacts differently. In RelaxNG, the module contains a pattern giving the possible descendant nodes (elements, attributes, modules), whereas the <tei:classSpec> element declares its membership to upper modules. In other words, RelaxNG has a top-down behaviour (modules lists their members) and TEI ODD has a bottom-up behaviour (each element or class lists their membership to a class).
For instance, the module called "m.phrase.basic.norefs", which contains the elements <ead:abbr> and <ead:expan>, and the module "m.phrase.bare" becomes the class "model.phrase.basic.norefs" have different contents:

RelaxNG	ODD
<rng:define name="m.phrase.basic.norefs"> <rng:choice> <rng:ref name="m.phrase.bare"/> <rng:ref name="abbr"/> <rng:ref name="expan"/> </rng:choice> </rng:define>	<tei:classSpec ident="model.phrase.basic.norefs" type="model" module="EAD"> <tei:classes> <tei:memberOf key="model.para.content.norefs"/> <tei:memberOf key="model.phrase.plus"/> <tei:memberOf key="model.phrase.basic"/> </tei:classes> </tei:classSpec>

The information contained in <rng:define name="m.phrase.basic.norefs"> is encoded in the element specification of <ead:abbr> and <ead:expan> and in the class specification of the class corresponding to the RelaxNG module "m.phrase.bare" :

<tei:elementSpec ident="abbr" module="EAD">
...
<tei:classes>
<tei:memberOf key="att.EADGlobal"/>
<tei:memberOf key="model.phrase.basic.norefs"/>
</tei:classes>
...
</tei:elementSpec>

<tei:elementSpec ident="expan" module="EAD">
...
<tei:classes>
<tei:memberOf key="att.EADGlobal"/>
<tei:memberOf key="model.phrase.basic.norefs"/>
</tei:classes>
...
</tei:elementSpec>

<tei:classSpec ident="model.phrase.bare" type="model" module="EAD">
<tei:classes>

```
    <tei:memberOf key="model.phrase.basic.norefs"/>
  </tei:classes>
</tei:classSpec>
```

- Content declaration: <tei:content>

<content> contains the machine-readable schema declaration of the content of the described element. It may be defined with a set of TEI ODD elements, or by using RelaxNG patterns (the solution we use in this particular case). In that case, some patterns contained in the RelaxNG <rng:element> are copied and declared in the RelaxNG namespace. It's the case for the patterns declaring which nodes are accepted as child of a given element.

Taking for example the element <ead:unittitle>, we can see that most of the element declaration sequence is the same in the RelaxNG schema and in the EAD ODD :

RelaxNG	ODD
<element name="unittitle"> <ref name="a.common"/> <optional> <attribute name="label"/> </optional> <optional> <attribute name="encodinganalog"/> </optional> <optional> <attribute name="type"/> </optional> <zeroOrMore> <choice> <text/> <ref name="m.phrase.basic"/> <ref name="m.access"/> <ref name="unitdate"/> <ref name="num"/> <ref name="date"/> <ref name="bibseries"/> <ref name="edition"/> <ref name="imprint"/> </choice> </zeroOrMore> </element>	<elementSpec ident="unittitle" module="EAD"> <!-- <tei:gloss> and tei:desc> --> <classes> <memberOf key="att.EADGlobal"/> <memberOf key="att.typed"/> <memberOf key="att.labeled"/> <memberOf key="model.data"/> <memberOf key="model.did"/> </classes> <content> <rng:zeroOrMore> <rng:choice> <rng:text/> <rng:ref name="model.phrase.basic"/> <rng:ref name="model.access"/> <rng:ref name="unitdate"/> <rng:ref name="num"/> <rng:ref name="date"/> <rng:ref name="bibseries"/> <rng:ref name="edition"/> <rng:ref name="imprint"/> </rng:choice> </rng:zeroOrMore> </content> <!-- <tei:exemplum> and <tei:remarks> elements --> </elementSpec>

- Attributes definition

The available attributes for a given element are specified in a different way in ODD and in RelaxNG. In ODD, the attributes definition are always part of a list - <tei:attList> – that contains elements for each attribute – <tei:attDef>. However, ODD and RelaxNG share the same use of data types declaration for attributes, ODD borrows some RelaxNG elements, for instance <rng:data>:

RelaxNG	ODD
<attribute name="otherlevel"> <data type="NMTOKEN"/> </attribute>	<attList> <attDef ident="level"/> <attDef ident="otherlevel"> <desc>...</desc> <datatype> <rng:data type="NMTOKEN"/> </datatype> <remarks>...</remarks> </attDef> </attList>

In the EAD RelaxNG schema, attributes used by more than one element can be defined independently, and are then referenced with the element <rng:attribute> or <rng:ref> in the case where a group of attributes are defined together. In the EAD ODD, we created extra attributes classes for attributes that are used by more than one element, and uses the the class membership method to add attributes to an element. Following with <ead:unittitle>, we have:

<rng:ref name="a.common"/> <rng:optional> <rng:attribute name="label"/> </rng:optional> <rng:optional> <rng:attribute name="encodinganalog"/> </rng:optional> <rng:optional> <rng:attribute name="type"/> </rng:optional>	<tei:classes> <tei:memberOf key="att.EADGlobal"/> <!-- the class "att.EADGlobal" is similar to the RelaxNG attribute module "a.common" + contains also the attribute @encodinganalog --> <tei:memberOf key="att.typed"/> <!-- class for the attribute @type --> <tei:memberOf key="att.labeled"/> <!-- class for the attribute @label --> ... </tei:classes>

2.2.2 Describing the EAD format in TEI-ODD : overview

The table below presents an overview of the main elements described above, with an explanation of their particular use in the EAD-ODD.

ODD element or attribute	Definition (taken from the TEI guidelines)	Use in EAD ODD	Examples
elementSpec/@ident (identifier)	supplies the identifier by which this element may be referenced.		<elementSpec ident="archdesc" …>
elementSpec/@module	supplies a name for the module in which this object is to be declared.	In our case, we have only one module, which is EAD.	<elementSpec module="EAD" …>
gloss	a phrase or word used to provide a gloss or definition for some other word or phrase.	<gloss> contains the complete name of the element, as stated in the tag library	<gloss>Appraisal Information</gloss>
desc (description)	a brief description of the object documented by its parent element, typically a documentation element or an entity	In the EAD ODD, the value of <desc> is the first half of the tag LIbrary description, which gives a formal definition of the element and which kind of information it must contain. (see also the <remarks> element	<desc>A <gi>physdesc</gi> subelement for information about the quantity of the materials being described or an expression of the physical space they occupy. Includes such traditional archival measurements as cubic and linear feet and meters; also includes counts of microfilm reels, photographs, or other special formats, the number of logical records in a database, or the volume of a data file in bytes.</desc>
classes/memberOf/@key	specifies all the classes of which the documented element or class is a member or subclass.		<classes> <memberOf key="model.phrase.xml"/> </classes>

content (content model)	contains the text of a declaration for the schema documented	We copy the RelaxNG schema, but in the case where elements are defined as descendants of others elements (for instance, an XPATH such as : rng:define/rng:element /rng:element), we create and independant tei:elementSpec, and we link put a corresponding rng:ref in the first element definition	
attList/attDef	contains documentation for all the attributes associated with this element	In attDef, documentation elements such as <desc> are also used, as well as specification ones, in particular the <datatype> element which define which value the attribute can have.	<attList> <attDef ident="mainagencycode"> <desc>A code compliant with ISO/DIS 15511 Information and Documentation International Standard Identifier for Libraries and Related Organizations (ISIL). </desc> <datatype> <rng:text/> </datatype> <remarks> Values should be supplied without the country code, which should be placed instead in the COUNTRYCODE attribute. </remarks> </attDef> <attDef ident="url"> <desc>An absolute (http://www.loc.gov/ead/ms99999.xml) or relative (ms99999.xml) Uniform Resource Locator.</desc> <datatype> <rng:text/> </datatype> </attDef> … </attList>

exemplum	groups an example demonstrating the use of an element along with optional paragraphs of commentary.		<exemplum> <teix:egXML> <eadheader langencoding="iso639-2b" xmlns="urn:isbn:1-931666-22-9"> <eadid>[...]</eadid> <filedesc>[...]</filedesc> <profiledesc> <creation>[...]</creation> <langusage>Bilingual finding aid written in <language langcode="fre">French</language> and <language langcode="eng">English.</language> </langusage> </profiledesc> </eadheader> </teix:egXML> </exemplum>
remarks	contains any commentary or discussion about the usage of an element, attribute, class, or entity not otherwise documented within the containing element.	In the EAD ODD, the <remarks> element value is the second part of the description of the EAD tag Library. The information given here are *caveat* (i.e. possible confusions between element), the evolution of the element specification since EAD 1.0 and the crosswalk with ISAD(G)	<remarks> The <gi>physdesc</gi> element is comparable to ISAD(G) data element 3.1.5 and MARC field 300. </remarks>

Table 1 : *Sub elements of ODD <elementSpec> used in the EAD ODD*

2.3 Creating an EHRI-EAD schema

As we said, the power of ODD lies on its abilities of customization. It is possible and straightforward to create and document specific profiles (or EAD flavours) for an institution, a group of institutions (in a given country for example) or a portal. For EHRI, we created another ODD to document the specific rules and constraints of the EHRI data model.
In this new ODD file, called EHRI_EAD.odd, the generic EAD specification is imported and serves the baseline of specification. The additional constraints are added only to the elements that they refer to. Therefore, the EHRI_EAD.odd file only contains the <tei:elementSpec> and <tei:classSpec> that are modified. The merge of the two ODD files – the EAD generic and the EHRI specific – is made when we apply a transformation[14].

2.3.1 Typology of the constraints

The constraints that we need to add to EAD in order to ensure a smooth ingestion of descriptions in the database are of two types. First, some EAD elements are required for the good functioning of the database, for instance unique identifiers for all the descriptions (contained in <ead:eadid>). Second, some elements are made mandatory for more qualitative reasons: for instance, to ease the discoverability of its resources, EHRI wants that a minimal description in English is provided with each description unit. Another example is the fact that EHRI encourage the use of ISO standards for the representation of languages, scripts, dates, etc, as well as the interlinkage of entities, via the use of authority lists.

Many Schematron rules were already used in EHRI, so we integrated them directly in the EHRI-EAD ODD[15]. They are extensively listed in section 2.3.2. The table below lists additional constraints spotted in the EHRI guidelines.

ISAD(G) field concerned by the constraint	Corresponding EAD elements or paths	Expression of the constraint
Reference codes ISAD(G) 3.1.1	ead:eadid ead:unitid	Copy the reference number given by the collection-holding institution
Other forms of title	ead:proper ead:unititle	It is an EHRI requirement to provide English translations of non-English language titles
Dates ISAD(G) 3.1.3 for dates of the descriptions units	ead:date ead:unitdate	Follow the ISO 8601 standard (Data elements and interchange formats -- Information interchange

[14] http://www.tei-c.org/Guidelines/Customization/odds.xml#body.1_div.2_div.7
[15] https://github.com/EHRI/data-validations/blob/master/schematron/ehri_ead.sch

		-- Representation of dates and times.) The standardized form is YYYY-MM-DD
Level of description ISAD(G) 3.1.4	ead:archdesc/@level ead:c{01-06}/@level	ISAD(G) 3.1.4 has a predefined list of units. As EHRI works with archives and collections that have not been arranged according to traditional rules, the terms used for the levels of description might also deviate. It is therefore chosen that this list should be flexible and expandable.
Archival history	ead:custodhist ead:acqinfo	3.2.4 "Immediate source of acquisition or transfer" has been included in this element.
Access points	ead:controlaccess/ead:subject ead:controlaccess/ead:placename ead:controlacess/ead:persname ead:controlaccess/ead:famname ead:controlaccess/ead:corpname ead:controlaccess/ead:geogname	Wish to support linkage with EHRI authorities lists, thesauri or international recognized gazetteers (like Geonames for plan names).
Languages of materials ISAD(G) 3.4.3	ead:language/@langcode	Mandatory in EHRI Its value must be in the ISO 639-1 or ISO 639-2 lists (International Standards for Language Codes).
Scripts of materials ISAD(G) 3.4.3	ead:langmaterial/ead:language/@scriptcode	Mandatory in EHRI Its value must be in the ISO 15924 list (International Standard for Names of Scripts).
Existence and locations of originals ISAD(G) 3.5.1	ead:originalsloc	The link to Repository Authority list and the request for extra information is specific to EHRI

Existence and locations of copies	ead:altformavail	The link to Repository Authority list is specific to EHRI
Publication note	ead:bibliography	Combination of guidelines from ISAD(G) and ISBD and Guidelines created by EHRI for describing personalities and corporate bodies.
Institution Identifier To identify the agency(ies) responsible for the description	ead:titlestmt/ead:author	Mandatory in EHRI
Language of description	ead:langusage/ead:language/@langcode	Mandatory in EHRI Its value must be in the ISO 639-1 or ISO 639-2 lists (International Standards for Language Codes).
Script of description	ead:langusage/ead:language/@scriptcode	Mandatory in EHRI Its value must be in the ISO 15924 list (International Standard for Names of Scripts).
Sources To identify providers of metadata descriptions, other than collection holding institutions	ead:titlestmt/ead:author	Mandatory in EHRI
EHRI scope To identify the extent of Holocaust related material within the total collection	ead:odd[type="EHRI-scope"]	Desirable in EHRI
EHRI copyright	ead:publisher	Mandatory in EHRI
Rules or conventions ISAD(G) 3.7.2	ead:descrules	Mandatory in EHRI
Date(s) of description ISAD(G) 3/7.3	ead:processinfo/ead:p/ead:date	Mandatory in EHRI Use of ISO 8601 standard.

Table 2 : *Constraints expressed in the EHRI guidelines*

Other constraints were spotted by EHRI database managers to ease the process of importing EAD documents into the database or were gathered by analysing samples from collections holding institutions (CHI). This approach will permit at the end to have a very good quality of the EAD files, based on the very specific remarks made on relevant sample files.

For instance, an emphasis has been put on the respect of basic ISO standards for such information as dates, country codes, language and script codes. This good practice, followed by the EHRI database, and for some parts by EAD, is therefore implemented as schematron rules that test the content of some elements or attributes with regular expressions. For the country codes, the language codes and the script codes, we went a beyond the use of regular expressions, and the schematron rules tests the codes found in the input description against an up-to-date list of these codes, maintained by the Parthenos projet[16].

All the constraints were sorted in categories, that we call roles. The different roles are:

- MUST: mandatory for import process or according to the EAD (in case we want to particularly highlight a requirement)
- SHOULD: mandatory for description process, i.e. in terms of archival description. The SHOULD rules are not technically mandatory, but if they are not respected in the input description, it would be considered as incomplete, with potential comprehension issues
- COULD: Non mandatory rules. This role gathers the rules that would enhance the general quality of the description, without any obligation for the provider to follow the recommendation. They focus on the content based element of <ead:archdesc>, pointing that they could be added in the description, if they are not present in the input file :
    - <ead:custodhist>
    - <ead:otherfindaid>
    - <ead:originalsloc>
    - <ead:altformavail>
    - <ead:bibliography>
    - <ead:odd>
    - <ead:note>
    - <ead:controlaccess>

This categorization is taken from the work previously done in EHRI around the preprocess of the EAD descriptions with the help of schematron rules[17].

[16] https://github.com/ParthenosWP4/standardsLibrary/tree/master/ISO
[17] https://cdn.rawgit.com/EHRI/data-validations/master/schematron/rules.html

2.3.2 Creating the customized EAD schema

Specific profiles are derived from the ODD master source described above (the generice EAD ODD). For each new EAD profile, a new ODD must be created. It must claim its inheritance to the master source, and modify the specifications elements needed, i.e. the <tei:elementSpec> and <tei:classSpec> that have a different behaviour. To change these behaviours, there are several solutions. The first one, the simplest, is the modification of schema declaration elements: it means that the <tei:content>, the <tei:attList> or the <tei:memberOf> are directly modified.
Another solution, the one we favours, is the use of additional schematron rules, because it doesn't change the EAD schema and allow us to provide to the user a comprehensive feedback. We created so far 70 rules that follow the constraints expressed above, but it is

very likely that new rules will be added in the next months, as long as new descriptions are ingested in the portal. There are more schematron rules than there are expressed constraints, because some rules need to be applied to more than one element.
The rules are built with the element <sch:assert>, which means that the error message will be displayed when the pattern is not found.

All the rules are listed in the following table, whose columns contain :

- the identifier of the rule
- The context in which the rule is applied
- The description of the rule in human-readable form, i.e. the message that the end user will get if the rule is applied
- The role, i.e. the category of the rule, as stated above (MUST, SHOULD, COULD)
- The actual pattern searched in the document by the schematron engine.

identifier	context	description	role	Pattern searched
levelRequired	ead:archdesc	<ead:archdesc> MUST have a @level attribute.	MUST	@level
levelRequired	ead:c01	<ead:c01> MUST have a @level attribute.	MUST	@level
levelRequired	ead:c02	<ead:c02> MUST have a @level attribute.	MUST	@level
levelRequired	ead:c03	<ead:c03> MUST have a @level attribute.	MUST	@level
levelRequired	ead:c04	<ead:c04> MUST have a @level attribute.	MUST	@level
levelRequired	ead:c05	<ead:c05> MUST have a @level attribute.	MUST	@level
levelRequired	ead:c06	<ead:c06> MUST have a @level attribute.	MUST	@level
dateNormal	ead:date	All the <ead:date> elements MUST have a @normal attribute whose pattern respects the ISO8601 standard and take the following form: YYYY-MM-DD	MUST	matches(@normal, '^(([0-9]|[1-9][0-9]|[1-9][0-9]{2}|[1-9][0-9]{3}))-(0[1-9]|1[012])-(0[1-9]|[12][0-9]|3[01])$')
unitidRequired	ead:did	<ead:did> elements MUST contain <ead:unitid>	MUST	ead:unitid
unittitleRequired	ead:did	ead:did elements MUST contain <ead:unittittle>	MUST	ead:unittitle
unittitleNotEmpty	ead:did	a <ead:did> MUST have at least one non-empty <ead:unittitle>	MUST	count(ead:unittitle[text()]) > 0
dscType	ead:dsc	<ead:dsc> MUST have a @type attribute	MUST	@type

dscothertype	ead:dsc	if <ead:dsc>'s type attribute has "othertype" for value, <ead:dsc> MUST have a not empty @othertype attribute	MUST	not(@type ='othertype') or (@othertype and not(@othertype=''))
profiledescRequired	ead:eadheader	<ead:eadheader> MUST contain a <ead:profiledesc> element	MUST	ead:profiledesc
mustContainText	ead:eadid	the <ead:eadid> element MUST contain text. Most of the time, it is automatically generated by the archival tool.	MUST	normalize-space(.)
langcodeRequired	ead:language	<ead:language> MUST have a @langcode attribute. See also the rule on @langcode and ISO 639:	MUST	@langcode
langusageRequired	ead:profiledesc	<ead:profiledesc> MUST contain information on the language used in the EAD document, in a <ead:langusage> containing a <ead:language> element	MUST	ead:langusage/ead:language
normalRegex	ead:unitdate	The @normal attribute of <ead:unitdate> must respect the ISO8601 pattern = YYYY-MM-DD	MUST	$end-date castable as xs:date
uniqueId	ead:unitid	In a given EAD document, all	MUST	count(//ead:unitid[@l
		the <ead:unitid> elements MUST be unique		abel = 'ehri_main_identifier']) = count(distinct-values(//unitid[@label = 'ehri_main_identifier']))

otherlevel	ead:ead	If the attribute @level has the value 'otherlevel', an attribute @otherlevel MUST be added	MUST	not(@level = 'otherlevel') or (@otherlevel and not(@otherlevel = ''))
descrules	ead:profiledesc	<ead:descrules> has a default value added automatically by EHRI. Therefore, the content of <ead:descrules> will be overwritten	MUST	not(normalize-space(ead:descrules))
familynameCommaGivenname	ead:controlaccess/ead:persname	In the access points, person names SHOULD be structured like this : Family name, given name	SHOULD	[0-9a-zA-Z]+(,[0-9a-zA-Z]+)*
orignationDesirable	ead:archdesc	<ead:archdesc> SHOULD contain a non-empty ead:origination element.	SHOULD	ead:did/ead:origination and normalize-space(ead:did/ead:origination)
archdescProcessinfoDesirable	ead:archdesc	<ead:archdesc> should contain a non-empty <ead:processinfo> element.	SHOULD	normalize-space(ead:processinfo)
archdescProcessinfoDateDesirable	ead:archdesc	The <ead:processinfo> element SHOULD contain a <ead:date> element as descendant.	SHOULD	normalize-space(ead:processinfo/ead:p/ead:date)
noc07c12	ead:c06	The component elements SHOULD be numbered components between <ead:c01> and <ead:c06>	SHOULD	ead:c07

noc07c12	ead:c07	The component elements SHOULD be numbered components between <ead:c01> and <ead:c06>	SHOULD	ead:c08

noc07c12	ead:c08	The component elements SHOULD be numbered components between <ead:c01> and <ead:c06>	SHOULD	ead:c09
noc07c12	ead:c09	The component elements SHOULD be numbered components between <ead:c01> and <ead:c06>	SHOULD	ead:c10
noc07c12	ead:c10	The component elements SHOULD be numbered components between <ead:c01> and <ead:c06>	SHOULD	ead:c11
noc07c12	ead:c11	The component elements SHOULD be numbered components between <ead:c01> and <ead:c06>	SHOULD	ead:c12
dateNotEmpty	ead:change	The <ead:date> element for each change in <ead:revisiondesc> SHOULD not be empty	SHOULD	normalize-space(ead:date)
parallelTitleEnglish	ead:eadheader	If the language of the description is not English, a parallel form of the title in English SHOULD be added. For instance, using another <ead:unittitle> element with a @type attribute	SHOULD	ead:profiledesc/ead:langusage/@langcode = 'eng'
creationDesirable	ead:eadid	<ead:eadid> SHOULD contain a @mainagencycode	SHOULD	@mainagencycode
		attribute, which provides (if applicable) the ISO 15511 code for the institution that maintains the finding aid.		

scriptcodeRequired	ead:language	<ead:language> MUST have a @scriptcode attribute. See also the rule on @scriptcode and ISO 15924:	SHOULD	@scriptcode
nonemptyPhysdescDesirable	ead:physdesc	In the <ead:did> element, <ead:physdesc> SHOULD come with a non-empty <ead:extent>	SHOULD	normalize-space(ead:extent[1])
creationDesirable	ead:profiledesc	<ead:eadheader> SHOULD contain a <ead:creation> element	SHOULD	ead:creation
notempty	ead:publicationstmt	<ead:eadheader> SHOULD specify a <ead:publisher>	SHOULD	ead:publisher
normalNotEmtpy	ead:unitdate	<ead:unitdate> SHOULD have a non-empty normal @attribute	SHOULD	normalize-space(@normal)
notEmpty	ead:unitid	Each unit of description SHOULD have an identifier in the element <ead:unitid>.	SHOULD	normalize-space(.)
Regexrepositorycode	*[@repositorycode][preceding::ead:eadHeader/@repositoryencoding = 'iso15511']	If the @repositoryencoding is set to "iso15511", the format of the value of the @repositorycode attribute is constrained according to the International Standard Identifier for Libraries and Related Organizations (ISIL: ISO 15511): a prefix, a dash, and an identifier.	SHOULD	matches(@repositorycode, $iso15511Pattern)
levelFonds	ead:ead	The <ead:archdesc> element can have for	SHOULD	not(@level = 'fonds') or name(.) =
		@level the value 'fonds', not the subcomponents, <ead:c01> to <ead:c06>		'archdesc'

recordgrplevel	ead:ead	A component with @level="recordgrp" SHOULD be a child of another component with @level="recordgrp"	SHOULD	not(@level = 'recordgrp') or (parent::*[@level = 'recordgrp'] or (name(.) = 'archdesc') or (name(.) = 'c01') and ancestor::*[@level = 'recordgrp'])
subgrpLevel	ead:ead	A component with @level="subgrp" SHOULD be a child of another component with @level="subgrp" or "recordgrp"	SHOULD	not(@level = 'subgrp') or ((parent::*[@level = 'recordgrp' or @level = 'subgrp']) or (name(.) = 'c01') and ancestor::*[@level = 'recordgrp'])
subseriesLevel	ead:ead	A component with @level="subseries" SHOULD be a child of another component with @level="subseries" or "series"	SHOULD	not(@level = 'subseries') or parent::*[@level = 'subseries' or @level = 'series']
scopecontentInArchdescOrC	ead:archdesc	A <ead:scopecontent> element SHOULD be present in the description at least in <ead:archdesc>, if not in the <ead:c01> to <ead:c06> elements.	SHOULD	ead:scopecontent or ead:dsc/ead:c01/descendant-or-self::ead:scopecontent
change-date-item	ead:change	In <ead:revisiondesc>, each <ead:change> element SHOULD contain a <ead:date> element and a <ead:item> element.	SHOULD	.[ead:date and ead:item]
unNumberedC	ead:dsc | ead:c01 | ead:c02 |	the ead:dsc components SHOULD numbered, from <ead:c01> to <ead:c06>	SHOULD	not(ead:c)

	ead:c03 | ead:c04 | ead:c05			
copyLinking	ead:altformavail/ead:p	If the element <ead:altformavail> is not empty, you COULD try to identify if the originals are present in the EHRI portal and make a link between the two descriptions.	COULD	not(normalize-space(.))
archdescLevelValues	ead:archdesc	The value of the <ead:archdesc> @level attribute SHOULD be limited to four values: 'fonds', 'recordGrp', 'collection', 'otherlevel'	COULD	@level = 'fonds' or @level = 'recordGrp' or @level = 'collection' or @level='otherlevel'
langmaterialPossible	ead:archdesc	The <ead:archdesc> element COULD contain a @langmaterial element.	COULD	ead:did/ead:langmaterial
custodhistPossible	ead:archdesc	The <ead:archdesc> element COULD contain a <ead:custodhist> element.	COULD	ead:custodhist
otherfindaidPossible	ead:archdesc	The <ead:archdesc> element COULD contain a <ead:otherfindaid> element.	COULD	ead:otherfindaid
originalslocPossible	ead:archdesc	The <ead:archdesc> element COULD contain a <ead:originalsloc> element.	COULD	ead:originalsloc
altformavailPossible	ead:archdesc	The <ead:archdesc element COULD contain a <ead:altformavail> element.	COULD	ead:altformavail
bibliographyPossible	ead:archdesc	The <ead:archdesc element COULD contain a <ead:bibliography>	COULD	ead:bibliography

		element.		
oddPossible	ead:archdesc	The <ead:archdesc element COULD contain a <ead:odd> element	COULD	ead:odd
notePossible	ead:archdesc	The <ead:archdesc> element COULD contain a <ead:note> element.	COULD	ead:note
controlaccessPossible	ead:archdesc	The <ead:archdesc> element COULD contain a <ead:controlaccess> element.	COULD	ead:controlaccess
controlaccessSubjectPossible	ead:controlaccess	In ead:controlaccess, EHRI welcomes any access points types : <ead:subject>, <ead:geogname>, <ead:persname>, <ead:orgname>.	COULD	ead:subject | ead:geogname | ead:persname | ead:orgname
authfilenumberPossible	ead:controlaccess	Access points COULD be chosen in authority lists. The list is declared with a @source attribute. The related id of this authority should be declared in an @authfilenumber attribute. Note that EHRI provides URLs for vocabularies and authorities. Check the EHRI website for more information	COULD	.[@authfilenumber and @source]
creationDateNotempty	ead:eadheader	A date of creation for the finding aid is welcome. The relevant element is <ead:date>, child of <ead:creation>	COULD	ead:creation/ead:date and normalize-space(ead:creation/ead:date)
langmaterialLanguage	ead:langmaterial	<ead:langmaterial> COULD contain a ead:language element.	COULD	ead:language

originalsLinking	ead:originalsloc /ead:p	If the element <ead:originalsloc> is not empty, you COULD try to identify if copies are present in the EHRI portal and make a link between the two descriptions.	COULD	not(normalize-space(.))
labelDesirable	ead:unitdate	<ead:unitdates> COULD have a @label attribute or an @encodinganalog attribute, describing the type of date	COULD	normalize-space(@label) or normalize-space(@encodinganalog)
regexLangcode	*[exists(@langcode)]	The @langcode attribute SHOULD contain a code from the ISO 639 code list.	COULD	$langcodes//tei:f[@name='subType']/tei:symbol/@value = $code
ISOcode-Scriptcode	*[exists(@scriptcode)]	The @scriptcode attribute SHOULD contain a code from the ISO 15924 code list.	COULD	$scriptcodes//tei:f[@name='code']/tei:symbol/@value = $code
ISO-countrycode	*[exists(@countrycode)]	The @countrycode attribute SHOULD contain a code from the ISO 3166-1 code list.	COULD	$countrycodes//tei:f[@name='a2code']/tei:symbol/@value = $code

Table 3 : *Overview of the schematron rules*

2.4 Use of the schema in the mapping and validation workflow

The schema created from the ODD file is used for the mapping and the validation process of archival descriptions in EHRI database. This process will be designed and implemented by EHRI WP10 on Resource Identification and Integration Workflows. As we showed above, the EHRI-EAD schema is a RelaxNG schema with embedded schematron rules. These combined languages are used for different parts of the process, in a two-steps validation.

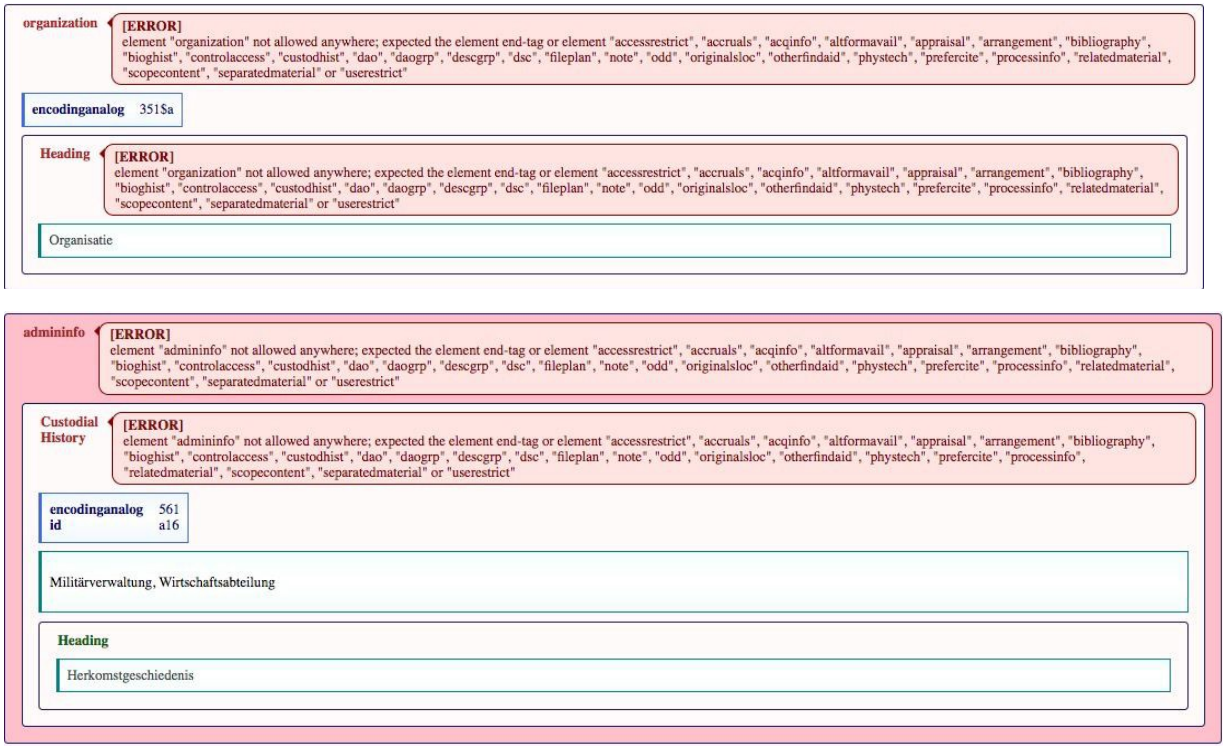
2.4.1 Technical validation: conformance with EAD

If the input descriptions are not expressed in EAD2002, the conversion tool transform them in this format, using the RelaxNG part of the schema, which is simply an instance of the EAD2002 RelaxNG schema. The potential error messages generated by the conversion tool are based on the generic EAD schema without the EHRI additional rules.

Two examples with an EAD1 file from CEGESOMA show typical validation error messages.

The element <ead:organization> and <ead:admininfo>, available in EAD1 but deprecated in EAD2002, are highlighted. These errors are easily solved by the conversion tool (<ead:organization> is merged with <ead:arrangement>, <ead:admininfo> is simply removed), and the error message is shown for documentation purposes, both for the CHI, which are then able to preprocess his descriptions before ingesting, based on this feedback, and the responsible of the conversion, as a log.

The two screenshots above shows how the error message are rendered in the conversion tool.



EAD validation errors in the Conversion tool.

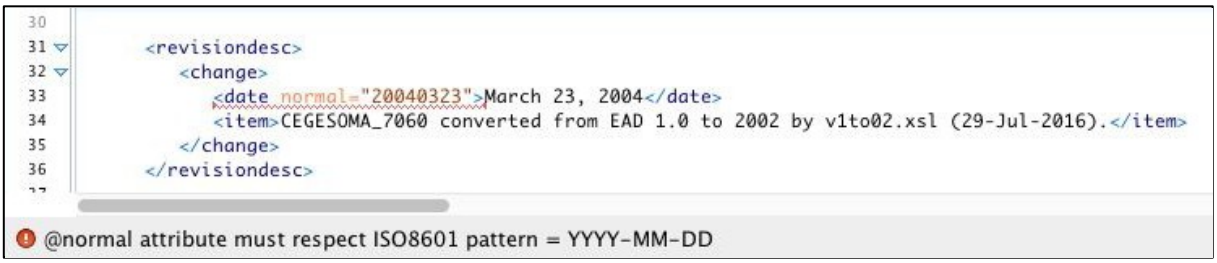
2.4.2 Qualitative validation: conformance with EHRI-EAD

The second step is the validation against the schematron rules. This is not yet implemented in the conversion tool. The protocol will be quite similar to the first validation process, apart from the display of the feedback messages.
The schematron rules embedded in the EHRI-EAD schema are meant to be presented as a diagnostic to the content providers. This diagnostic will point to elements of the EAD that, even if they are in valid EAD, are not in line with the EHRI requirements. As we stated above, they are of three types :

- Some messages emphasizes EAD validation errors by giving extra information,
- Some messages asks for modification in order to make the description compliant with the specific EHRI constraints,
- Some messages highlight some description elements that could be improved, but without any obligation to do so.

In the future implementation in the conversion tool, these three recommendation levels will correspond to three blocks of validation results, in order to show to the users the elements they need to update in priority.

Continuing the process of the above-mentioned CEGESOMA EAD1 file, the validation against schematron returns a log containing the location (line and character in the line) of the error and a description (the message created in the ODD specification). We show below a sample for each error severity. The first rule asks that the <ead:date> elements contains a @normal attribute whose content respect the ISO8601 standard on representation of dates and time. This is a technical requirement for all the dates ingested in EHRI's database.

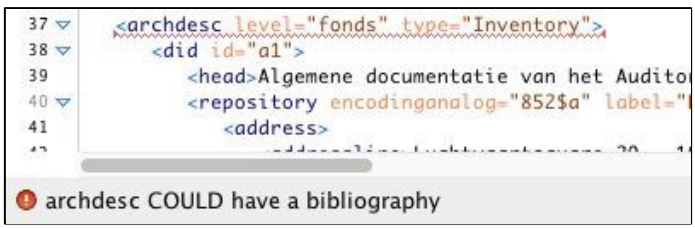


Date normalisation rule

The second rule is also a requirement, but for different reasons. For the sake of comprehension of the archival description, EHRI requires that a <ead:scopecontent> element should be present somewhere. the choice is let to the provider to write on general paragraph and put it at the highest level (<ead:archdesc>) or add a more precise <ead:scopecontent> for each subcomponents, from <ead:c01> to <ead:c06>. Here, the rule is called at the <ead:archdesc> level, because it is more likely that the CHI provides a global <ead:scopecontent> if it didn't exist before.

Scope and content absence rule

The last rule showed is the lowest level of constraint. It presents some possibilities to make the description more complete. In particular, these rules focuses on the content related elements of <ead:archdesc>. Therefore, these messages are not considered as real errors, but as pieces of advice that the providers can follow or not.



bibliography suggestion rule

A full description of the expected content (i.e. HTML "tag library") is generated from the ODD file (see it in annex). The conversion tool will display to the user the error message and a link to the relevant section of the documentation. This will be implemented in Schematron with an extra attribute (that would likely be `@see`), and a stable URL template in which to interpolate this ID.
Another implementation possibility would be, in some case, to modify the input file on the fly, based on the results of the schematron validation. This solution is made possible by the framework Schematron Quickfix, that allow us to define fixes for the schematron errors.[18]

[18] http://www.schematron-quickfix.com/ accessed on March 28th 2017

3 EHRI-EAC and EHRI-EAG: work in progress

A similar work is initiated with other entities potentially ingested in the EHRI database, the authorities (persons and corporate bodies) and the archival institutions, that can be described in EAC-CPF for the former, and EAG for the latter.

The ingestion of a significant amount of authorities in the portal is a real possibility, even if it is far less likely than the ingesting of EAD files. In particular, the use of EAG to describe archival institutions is not well spread yet and EHRI did a major work by manually entering the descriptions of 1922 institutions so far.

For the authorities, it is very likely that an institution has created relevant datasets that could be imported in the EHRI portal. For instance, CDEC has a large database of 10624 persons that are related to their archives. If the decision is taken to ingest all or a part of these data in EHRI portal, an automatic processing should be put in place.

Like for EHRI-EAD, the idea is to create a EHRI-EAC-CPF and a EHRI-EAG schema, based on generic ODD files that are currently being created by the Parthenos project[19]. However, we need to wait for stable versions of these ODD specifications before considering the implementation for EHRI. The release of these stable versions is scheduled by the end of the summer 2017.

4 Contribution to the design of consistent URLS in EHRI

4.1 Introduction

It is recommended to employ Universal Resource Identifiers (URLs) for EHRI data resources such as archives and units of archival material. Wherever possible, existing published URLs should be used and so these recommendations cover those components of the EHRI metadata infrastructure which are not already addressed by the work of others. There are many important reasons for employing PIDs in a system such as EHRI. The primary rationale is the long-term functional viability of the EHRI portal and its preservation. The use of IDs which are not persistent, such as URLs which can change as resources are moved around the EHRI architecture or between servers, is likely rapidly to cause problems of dead links and difficult-to-find data. The work done in this task focuses on building of consistent URLs. Implementing and design of persistent identifiers will be outside WP11. This will be part of T13.4 Integrating Information Architecture and T13.2 Secure Long-term Access Infrastructure for the preservation of Holocaust Research Objects.

[19] https://github.com/ParthenosWP4/standardsLibrary/tree/master/archivalDescription/EAC and https://github.com/ParthenosWP4/standardsLibrary/tree/master/archivalDescription/EAG (accessed on March 27th 2017)

4.2 Rationale for using consistent URLs in EHRI

4.2.1 Principles

As a research resource, it is important that EHRI resources are referenceable and citable in a permanent format. The two main principles to be followed are the uniqueness (one resource = one unique URL) and durability (URLs are not likely to change). Before EHRI tackles the issue of creating persistent identifiers, a preliminary work is needed on the URLs to make them more consistent.

However, the needs of designing a good URL scheme don't conflict with those of designing a navigable website. A way to tackle the challenges of consistency and persistency is to build a URL scheme independently from the portal URLs, which have different purposes and functionalities. The URL scheme will be used to identify each individual resource present in EHRI database, as well as each dataset. Of course, the website URLs and the URLs should at some point be built on the same schema.

The datasets of the EHRI portal which will benefit from consistent URLs include:

- vocabularies
- authorities
- documentary units
- archival institutions
- countries
- research guides

In this list, a focus should be put on the vocabularies. Creating consistent URLs for the different vocabularies and authority lists is crucial for EHRI. These vocabularies could be seen as reference for Archival and scholarly communities working on Holocaust related materials. The central vocabularies and authority lists that require URLs are

- Concepts/Terms
- Ghettos
- Camps
- Administrative Districts
- Events
- Corporate Bodies
- Personalities

4.2.2 URLs construction

In the approach we suggest, each type of URL includes a *prefix*, a reference to the dataset the resource belongs to, and a *reference* to the identifier of the resource.
The URLs structure in often a combination of several reference. For instance, a documentary unit URL combines the reference of the documentary unit itself, its potential ancestors in the archival fonds hierarchy, the institution that holds it, and the country in which this institution is based. To separate the different parts of the URLs, we favour the slash instead of the

hyphen, to show the hierarchical relations between the components.

- **Prefix**

The prefix data.ehri-project.eu/ is already used to reference the available vocabularies and ontologies used by EHRI (Administrative districts, Nazi concentration camps, Ghettos, events, thesaurus, lists of persons). We recommend to extend this use to all the EHRI resources that need to be identified with a consistent URL, as listed above.

The prefix portal.ehri-project.eu/ is used to navigate through the website, and shouldn't be used to reference a resource.

- **Dataset reference**

In EHRI semantic ecosystem, each resource is part of a dataset, as listed above. the identification of the datasets are presented in lowercase, with words separated by hyphens if necessary, and in the plural. For the datasets identified, we propose:

- Vocabularies → vocabularies
- Authorities → authorities
- Documentary units → units
- Archival institutions → institutions
- Countries → countries
- Research guides → guides

- **Entity Reference**

The reference is the string that is used to identify an individual entity of a given dataset. There are two approaches for the format of the URLs reference part. One would be to use a reference component of each URL translated to legal IRI format (lower case, spaces replaced by hyphens) [Duerst, 2005]. The other is to use codes or notation for the references. Using codes may be less prone to error and to changes in name, so it is the solution we recommend, which is by the way already implemented.

We advocate the use of ISO code lists when it's relevant. To identify the countries (by country, we mean a present country where are based archival institutions holding Holocaust related material), the use of ISO 3166 country codes list is already a good practice followed by EHRI. Ideally, we would have welcomed the use of the International standard identifier for libraries and related organisations (ISO 15511), that provide a code (called ISIL) for each cultural heritage institution. However, code lists are maintained on a national basis, and so far, only 29 countries in the world have a stable ISIL list.

For the documentary units, the question remains open and two approaches are still considered. The first one is to construct the URL of the description unit through concatenation of the identifiers of the description units following the hierarchy path of the imported EAD description. This ensures the uniqueness of the identifier, but this approach has a backside : if a description unit changes position in the hierarchy, its URL will change too (given that the URLs are automatically generated from the hierarchy of the archival descriptions in the database).
The second approach consists on assigning an identifier to each metadata record regardless its position in the hierarchy. It has a clear advantage: if the archival material is reorganized in

a institution and the hierarchy of the archival collections changes, the URL of the description unit won't change if it has been identified though a persistent identifier. But the weak side is that some institutions don't provide unique identifiers, especially for the lowest levels of the hierarchy (as file or document), and they can be disambiguated only using contextual information.
This stated, the path-dependent solution is favoured, as long as a global persistent and unique identifier system is not put in place.

4.2.3 Challenge of assessing persistence

EHRI can only assess the persistence of the URLs for the data that is directly produced by the research infrastructure:

- Descriptions of CHIs,
- Vocabularies
- Country reports
- Authority lists

To assess persistence to the URLs of imported data is a quite more complex task, since it doesn't depend only of persistence policies in the EHRI project. If the CHIs don't provide persistent identifiers to their metadata records, EHRI cannot provide a sustainable way to identify the records in a persistent way after updates of the material imported into the portal.

4.3 Proposals summary

vocabulary set	http://data.ehri-project.eu/vocabularies/concepts http://data.ehri-project.eu/vocabularies/ghettos http://data.ehri-project.eu/vocabularies/camps http://data.ehri-project.eu/vocabularies/districts http://data.ehri-project.eu/vocabularies/events
vocabulary term	http://data.ehri-project.eu/vocabularies/{concepts,districts,ghettos,camps,events}/{numericID}
authority list	http://data.ehri-project.eu/authorities/corporate-bodies http://data.ehri-project.eu/authorities/persons
authority instance corporate body	http://data.ehri-project.eu/authorities/corporate-bodies/{numericID}
authority instance person	http://data.ehri-project.eu/authorities/persons/{numericID}
country reports	https://portal.ehri-project.eu/countries/{ISO3166_code}

archival institution	https://data.ehri-project.eu/institutions/{ISO3166_code}/{numericID}
documentary unit	https://data.ehri-project.eu/units/{ISO3166_code}/{numericID}/{DocumentaryUnitIDandorHierarchy}
research guides	https://portal.ehri-project.eu/guides/terezin/vocabularies/{term} https://portal.ehri-project.eu/guides/terezin/authorities/victims/{victim} https://portal.ehri-project.eu/guides/jewishcouncil/vocabularies/places/{place}

4.4 Implementation issues

There are various technical issues that need to be considered and resolved before a new permalink URL structure can be implemented. The EHRI portal has an existing URL scheme that is similar, but not identical, to that proposed above. Since the portal has been running for several years, it would not be practical to migrate the URLs of several hundred thousand items to new URLs. This implies that the legacy URLs would have to exist alongside those with the new scheme, increasing the overall maintenance overhead of the EHRI Infrastructure.

Moreover, the existing legacy URLs serve a somewhat different purpose to that of the permalinks proposed here in that they primarily support functionality in the portal website, rather than just providing canonical global identifiers. Notably, there is a richer vocabulary of website-specific actions such as:

- https://portal.ehri-project.eu/units/sk-003276-22523 <- main item page
- https://portal.ehri-project.eu/units/sk-003276-22523/search <- search page
- https://portal.ehri-project.eu/units/sk-003276-22523/export <- item export page

Their action-specific variation substantially increases the total number of resolvable URLs on the portal website relative to the number of canonical URLs that would exist and has the potential to cause confusion.

Since EHRI does not at present use URLs internally, an additional technical issue involves the mapping of URLs to item identifiers. At present, item identifiers in EHRI are global and hierarchical, with hyphens delimiting levels of hierarchy. Using URLs with slashes delimiting path sections would add an additional translation step before items can be internally resolved. In many cases, a simple translation of forward-slashes to hyphens may suffice, assuming a fixed prefix.

Given these constraints, implementation of URLs will need to proceed carefully and with coordination across several work-packages which rely on EHRI's portal and surrounding infrastructure (notably WP7, WP12, and WP13). However, there are relatively few purely technical issues that should hinder technical delivery aside from those enumerated above.

5 Summary

This document describes mechanisms where interoperability of data is ensured with the use of standards. The standards we covered are both domain related, the archival standards in XML formats such as EAD, EAC-CPF and EAG, and transversal standards, whose use is recommended in the context of any digital project, in particular the ISO standards for the representation of language, script and countries.

Interoperability of archival descriptions expressed in EAD is made possible with the specification of a specific EAD profile for EHRI. This profile is built and maintained using the TEI-ODD framework, which is explained of the first section of the report.

Interoperability and reusability of EHRI resources is also ensured with the design of more consistent URLs, composed with standardised methods and using ISO reference codes. This design has to be seen as a first step through a persistent identifier system.

The work initiated in WP11 and presented in this document will be continued, enhanced and developed by other EHRI work packages, WP7 Virtual Access to EHRI Virtual Observatory, WP10 Resource Identification and Integration Workflows and WP13 Research Data Infrastructures for Holocaust Material.

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7 Appendix: Full documentation of the EHRI_EAD schema (version 1, March 2017)

Guidelines

In the context of the EHRIproject, we created an ODD base on the EAD ODD maintained by the Parthenos project, to document the specific rules and constraints of the EHRI data model for archival descriptions. In this new ODD file, called EHRI_EAD.odd, the generic EAD specification is imported and serves the baseline of specification. The additional constraints are added only to the elements that they refer to.

The constraints added to EAD ensures a smooth ingestion of external data in the EHRI's database.

First, some EAD elements are required for the good functioning of the database, for instance unique identifiers for all the descriptions (contained in <eadid>).

Second, some elements are made mandatory for more qualitative reasons: for instance to ease the discoverability of its resources, EHRI wants that a minimal description in English is provided with each description unit. We encourage the use of ISO standards for the representation of languages, scripts, dates, etc, as well as the interlinkage of entities, via the use of authority lists.

Schematron rules were already used in EHRI, so we integrated them directly in this EHRI-EAD ODD.

Specification

Elements

<abbr>

<abbr> (Abbreviation) A generic element for a shortened form of a word, including an acronym.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) expan The *expan* attribute can be used to supply the full form of an abbreviated word for indexing or searching purposes. **Status** Optional **Datatype**
Member of	model.phrase.basic.norefs
Contained by	EAD: abstract archref bibref creation descrules dimensions emph entry event extrefloc item label langmaterial langusage materialspec origination p physdesc physfacet physloc ref refloc repository subtitle titleproper unitdate unitid unittitle
May contain	Character data only
Note	See also related element Expansion <expan>.
Example	<note xmlns="urn:isbn:1-931666-22-9"> <abbr expan="Autograph Letter Signed">ALS</abbr> </note>
Content model	<content> </content>

Schema Declaration element abbr { att.EADGlobal.attributes, attribute expan { text }?, text }

<abstract>

<abstract> (Abstract) A very brief summary of the materials being described, used primarily to encode bits of biographical or historical information about the creator and abridged statements about the scope, content, arrangement, or other descriptive details about the archival unit or one of its components.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.langcode (*@langcode*) att.labeled (*@label*)

Member of model.did

Contained by EAD: archref did

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp ptr ref subtitle title

Note Within the <archdesc><did>, the <abstract> is often extracted from the longer descriptions found in <bioghist> and <scopecontent>. Its purpose is to help readers identify quickly those materials they need to explore at greater length. Within the <c><did>, the <abstract> may describe unique characteristics of an individual Component. This information may have aspects of <arrangement>, <bioghist>, <physdesc>, and <scopecontent>, which are not substantive enough to tag individually under those elements.Use of the TYPE and ENCODINGANALOG attributes on <abstract> may assist in extracting information for such MARC equivalents as summary note (520$a) and biographical or historical data (545$a). The LANGCODE attribute can be used when abstracts are provided in more than one language.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="fonds">
 <did>
  <head>Descriptive Summary</head>
  <unittitle label="Title">Richard Egan manuscript maps of
     Orange County</unittitle>
  <unitdate type="inclusive"
   normal="1878/1879">Circa
     1878-1879</unitdate>
  <unitid countrycode="us"
   repositorycode="cu-i" label="Collection number">MS-R72</unitid>
  <origination label="Creator">
   <persname rules="aacr2">Egan, Richard,
      1842-1923</persname>
  </origination>
  <physdesc label="Extent">
   <extent>1 linear foot (1 box)</extent>
  </physdesc>
  <repository label="Repository">
   <corpname rules="aacr2">University of California,
      Irvine. Library. Special Collections and
      Archives.</corpname>
  </repository>
  <abstract label="Abstract">Four manuscript survey maps and
    one plat map depicting areas of Orange County and
    attributed to the noted surveyor and judge Richard Egan.
```

```
    One map is dated 1878 and 1879 by Egan. The other maps
    are undated and unsigned but it is likely that he drew
    them during these years. These maps primarily depict
    subdivisions of non-rancho tracts of land occupying what
    is now Orange County, with the addition of some
    topographical details.</abstract>
  </did>
</archdesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element abstract
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.langcode.attributes,
   att.labeled.attributes,
   ( text | model.phrase.basic )*
}
```

<accessrestrict>

<accessrestrict> (Conditions Governing Access) Information about conditions that affect the availability of the materials being described. May indicate the need for an appointment or the nature of restrictions imposed by the donor, legal statute, repository, or other agency. May also indicate the lack of restrictions.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)

Member of model.desc.base

Contained by EAD: accessrestrict archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp

May contain EAD: accessrestrict address blockquote chronlist head legalstatus list note p table

Note Do not confuse with Conditions Governing Use <userestrict>, which designates information about limitations on the use of the described materials after access has been granted.In EAD Version 1.0 <accessrestrict> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.
The <accessrestrict> element is comparable to ISAD(G) data element 3.4.1 and MARC field 506.

Example

```
<accessrestrict xmlns="urn:isbn:1-931666-22-9">
 <p>There are no access restrictions on this collection.</p>
</accessrestrict>
```

Example

```
<accessrestrict xmlns="urn:isbn:1-931666-22-9">
 <p>University records are public records and once fully
```

```
    processed are generally open to research use. Records that
    contain personally identifiable information will be closed to
    protect individual privacy. The closure of university
    records is subject to compliance with applicable laws.</p>
  </accessrestrict>
```

Example

```
<p xmlns="urn:isbn:1-931666-22-9">
 <c02 level="file">
  <did>
   <container type="box" label="Box">104 </container>
   <container type="folder"
    label="Folder(s)">6578-6579 </container>
   <unittitle>
    <title render="italic">Technics and
        Civilization</title> (<title render="italic">Form
        and Personality</title> or <title render="italic">Form and Civilization</title>) <
/unittitle>
   <unitdate type="inclusive"
    normal="1931/1933">1931-1933</unitdate>
  </did>
  <scopecontent>
   <p>Draft fragments.</p>
  </scopecontent>
  <accessrestrict>
   <p>Only the photocopies (housed in Box 105) of these
      fragile materials may be used.</p>
  </accessrestrict>
 </c02>
</p>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element accessrestrict
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   head?,
   ( model.blocks | legalstatus | accessrestrict )+
}
```

<accruals>

<accruals> (Accruals) Information about anticipated additions to the materials being described. Can indicate quantity and frequency. Can also be used to indicate that no additions are expected.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.desc.base
Contained by	EAD: accruals archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp
May contain	EAD: accruals address blockquote chronlist head list note p table
Note	In EAD Version 1.0 <accruals> was a subelement of Administrative Information

<admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.The <accruals> element is comparable to ISAD(G) data element 3.3.3 and MARC field 584.

Example

```
<accruals xmlns="urn:isbn:1-931666-22-9">
 <p>No further materials are expected for this collection.</p>
</accruals>
```

Example

```
<accruals xmlns="urn:isbn:1-931666-22-9">
 <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>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element accruals
{
   att.EADGlobal.attributes,
   head?,
   ( model.blocks | accruals )+
}
```

<acqinfo>

<acqinfo> (Acquisition Information) The immediate source of the materials being described and the circumstances under which they were received. Includes donations, transfers, purchases, and deposits.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.desc.base

Contained by EAD: acqinfo archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 custodhist descgrp

May contain EAD: acqinfo address blockquote chronlist head list note p table

Note After opening a Paragraph <p> within <acqinfo>, optional subelements may be used to tag separately such common acquisition information as the name of the source, e.g., <persname> or <corpname>; the <date> the materials were received; or the accession number <num> assigned to them. The <address> element could be used to document the address of the source, and the *audience* attribute could be set to "internal," if the address information should only be available to authorized staff. Note that the accession number may also serve as the <unitid> and be encoded as such within a <did>.For detailed information about items acquired and then subsequently alienated from the materials being described, the Separated Material <separatedmaterial> element can be used. It designates items related by provenance that have been physically removed from the materials being described.

The Custodial History <custodhist> element can be used for information about the chain of ownership before the materials reached the immediate source of

acquisition.
In EAD Version 1.0 <acqinfo> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.
The <acqinfo> element is comparable to ISAD(G) data element 3.2.4 and MARC field 541.

Example

```
<acqinfo xmlns="urn:isbn:1-931666-22-9">
 <p>Transfer from <corpname>National Park Service, </corpname>
  <date type="accession">1945</date>. Accession number <num type="accession"
>45.22</num>.</p>
</acqinfo>
```

Example

```
<acqinfo xmlns="urn:isbn:1-931666-22-9">
 <p>Source unknown. Originally deposited in University Library,
   transferred to Department of Palaeography, <date normal="19580424">24 April 1
958</date>.</p>
</acqinfo>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element acqinfo
{
   att.EADGlobal.attributes,
   head?,
   ( model.blocks | acqinfo )+
}
```

<address>

<address> (Address) A generic element for information about the place where someone or something is located and may be reached. Examples include a postal address for a repository, or the electronic mail address and phone number of the party granting publication permission.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of model.inter.noquote
Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist blockquote controlaccess custodhist daodesc descgrp div dsc dscgroup entry event extrefloc index item note odd originalsloc otherfindaid p phystech prefercite processinfo publicationstmt ref refloc relatedmaterial repository scopecontent separatedmaterial userestrict
May contain EAD: addressline
Note Consider using an entity reference to store address information that occurs in many finding aids, as it is easier to update the information when located in a single, shared file. The entity reference can contain both the EAD elements and their content. A style sheet can also be used to supply this kind of information.
Example

```
<publicationstmt xmlns="urn:isbn:1-931666-22-9">
 <publisher>The Bancroft Library.</publisher>
```

```
<address>
 <addressline>University of California,
   Berkeley.</addressline>
 <addressline>Berkeley, California 94720-6000</addressline>
 <addressline>Phone: 510/642-6481</addressline>
 <addressline>Fax: 510/642-7589</addressline>
 <addressline>Email:
   bancref@library.berkeley.edu</addressline>
</address>
</publicationstmt>
```

Content model

```
<content>
</content>
```

Schema Declaration element address { att.EADGlobal.attributes, addressline+ }

<addressline>

<addressline> (Address Line) A generic element for one line of a postal or other address. May be repeated as many times as necessary to enter all available lines of an address.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: address
May contain EAD: emph extptr lb ptr
Example

```
<publicationstmt xmlns="urn:isbn:1-931666-22-9">
 <publisher>Special Collections and Archives</publisher>
 <address>
  <addressline>The UCI Libraries</addressline>
  <addressline>P.O. Box 19557</addressline>
  <addressline>University of California</addressline>
  <addressline>Irvine, California 92623-9557</addressline>
  <addressline>Phone: (949) 824-7227</addressline>
  <addressline>Fax: (949) 824-2472</addressline>
  <addressline>Email: spcoll@uci.edu</addressline>
  <addressline>URL:http://www.lib.uci.edu/rrsc/speccoll.html</addressline>
 </address>
 <date>© 2000</date>
 <p>The Regents of the University of California. All rights
   reserved.</p>
</publicationstmt>
```

Content model

```
<content>
</content>
```

Schema Declaration element addressline { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<altformavail>

<altformavail> (Alternative Form Available) Information about copies of the materials being described, including the type of alternative form, significant control numbers, location, and source

for ordering if applicable. The additional formats are typically microforms, photocopies, or digital reproductions.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)
Member of	model.desc.base
Contained by	EAD: altformavail archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp
May contain	EAD: address altformavail blockquote chronlist head list note p table
Note	Do not confuse with Location of Originals <originalsloc>, which is used to encode information about the existence, location, and availability of originals where the unit described consists of copies.In EAD Version 1.0 <altformavail> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002. The <altformavail> element is comparable to ISAD(G) data element 3.5.2 and MARC field 530.
Example	<altformavail xmlns="urn:isbn:1-931666-22-9"> This collection has been microfilmed and is available on three reels MF1993-034:1 to MF1993-034:3. Researchers interested in purchasing microfilm copies should contact the repository. </altformavail>
Example	<altformavail xmlns="urn:isbn:1-931666-22-9"> <head>Alternate Form of Material</head> Microfilm copy available (<num type="microfilm reel"> M-5030/1</num>). </altformavail>
Example	<c02 xmlns="urn:isbn:1-931666-22-9" level="file"> <did> <container type="reel" label="Film Storage">1</container> <unittitle> <title render="italic">The Man Who Hated Children</title> </unittitle> <unitdate normal="1972">1972</unitdate> <physdesc>16 mm. film</physdesc> </did> <altformavail> A VHS Videocassette version is available for viewing. Video tape is located in Video Storage. </altformavail> </c02>
Schematron	If the element <altformavail> is not empty, you COULD try to identify if the originals are present in the EHRI portal and make a link between the two descriptions. <s:rule context="ead:altformavail/ead:p"> <s:assert role="COULD" test="not(normalize-space(.))"> If the element altformavail is not empty, you COULD try to identify if the originals are present in the EHRI portal and make a link between the two descriptions</s:assert> </s:rule>

Content model <content/>

Schema Declaration
```
element altformavail
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  head?,
  ( model.blocks | altformavail )+
}
```

<appraisal>

<appraisal> (Appraisal Information) Information about the process of determining the archival value and thus the disposition of records based upon their current administrative, legal, and fiscal use; their evidential, intrinsic, and informational value; their arrangement and condition; and their relationship to other records.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.desc.base

Contained by EAD: appraisal archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp

May contain EAD: address appraisal blockquote chronlist head list note p table

Note In EAD Version 1.0 <appraisal> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.The <appraisal> element is comparable to ISAD(G) data element 3.3.2 and MARC field 583.

Example
```
<appraisal xmlns="urn:isbn:1-931666-22-9">
 <p>The records of the Mid-Ocean Dynamics Experiment came to the
   Institute Archives in two accessions in 1980 and 1982.
   During processing the collection was reduced from fifteen
   cubic feet to four by discarding duplicate materials,
   financial records, and publications not authored by MODE
   participants. Forty charts and six inches of raw data
   presented the primary appraisal issues. The raw data
   consisted of bulletins and reports referring to float
   positions, moorings, isotherms, geostrophic velocity
   calculations, ships' summaries, and work proposed and work
   carried out during the MODE-I experiment. As this raw data
   was recapitulated in weekly <title render="underline">MODE
   Hot Line Bulletins</title>, only a sampling was retained
   in the collection. Also discarded were ten charts for which
   there were no descriptions of indicated data points, nor
   were dates or test site locations provided.</p>
 <p>Six inches of materials pertaining to the POLYMODE project,
   1973-1980, were added to the Institute Archives POLYMODE
   collection.</p>
```

```
 <p>The appraisal of this collection was carried out in
  consultation with Robert Heinmiller, a research associate at
  Woods Hole Oceanographic Institution during MODE.</p>
</appraisal>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element appraisal
{
  att.EADGlobal.attributes,
  head?,
  ( model.blocks | appraisal )+
}
```

<arc/>

<arc/> (Arc) Specifies the rules for traversal among the participating resources in an extended link. Arc uses the attributes to and from to define the traversal between named pairs of resources.

Module EAD

Attributes att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.extended.els

Contained by EAD: daogrp linkgrp

May contain Empty element

Note While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink/.

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle>Photographs of John Smith and family
    members</unittitle>
  <unitdate type="inclusive"
   normal="1895/1928">1895-1928</unitdate>
  <daogrp linktype="extended">
   <daodesc>
    <p>Sample digitized image from this file: John Smith
       graduation portrait, <date normal="18950528">28
         May 1895</date>.</p>
   </daodesc>
   <resource linktype="resource"
    label="start"/>
   <daoloc entityref="f0042_1tmb"
    linktype="locator" label="thumb"/>
   <daoloc entityref="f0042_1ref"
    linktype="locator" label="reference"/>
   <arc linktype="arc" show="embed"
    actuate="onload" from="start" to="thumb"/>
   <arc linktype="arc" show="new"
```

```
    actuate="onrequest" from="thumb" to="reference"/>
  </daogrp>
 </did>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration element arc { att.xlink.attributes, empty }

<archdesc>

<archdesc> (Archival Description) A wrapper element for the bulk of an EAD document instance, which describes the content, context, and extent of a body of archival materials, including administrative and supplemental information that facilitates use of the materials. Information is organized in unfolding, hierarchical levels that allow for a descriptive overview of the whole to be followed by more detailed views of the parts, designated by the element Description of Subordinate Components <dsc> . Data elements available at the <archdesc> level are repeated at the various component levels within <dsc>, and information is inherited from one hierarchical level to the next.

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.relatedencoding (@*relatedencoding*) att.desc.c (level, @otherlevel)

level The hierarchical level of the materials being described by the element.

Derived from att.desc.c

Status *Required*

Schematron If the attribute *level* has the value 'otherlevel', an attribute *otherlevel* MUST be added
<s:rule context="ead:ead"> <s:assert role="MUST" test="not(@level = 'otherlevel') or (@otherlevel and not(@otherlevel = ''))">If the attribute level has the value 'otherlevel', an attribute otherlevel MUST be added</s:assert> </s:rule>

Schematron The <archdesc> element can have for *level* the value 'fonds', not the subcomponents, <c01> to <c06>
<s:rule context="ead:ead"> <s:assert role="SHOULD" test="not(@level = 'fonds') or name(.) = 'archdesc'">The archdesc can have for level the value 'fonds", not the subcomponents.</s:assert> </s:rule>

Schematron A component with *level*="recordgrp" SHOULD be a child of another component with *level*="recordgrp"
<s:rule context="ead:ead"> <s:assert role="SHOULD" test="not(@level = 'recordgrp') or (parent::*[@level = 'recordgrp'] or (name(.) = 'archdesc') or (name(.) = 'c01') and ancestor::*[@level = 'recordgrp'])">recordgrp SHOULD be a child of another recordgrp</s:assert> </s:rule>

Schematron A component with *level*="subgrp" SHOULD be a child of another component with *level*="subgrp" or "recordgrp"
<s:rule context="ead:ead"> <s:assert role="SHOULD" test="not(@level = 'subgrp') or ((parent::*[@level = 'recordgrp' or @level = 'subgrp']) or (name(.) = 'c01') and

ancestor::*[@level = 'recordgrp'])">subgrp SHOULD be a child of another subgrp or a recordgrp</s:assert> </s:rule>

Schematron A component with *level*="subseries" SHOULD be a child of another component with *level*="subseries" or "series" <s:rule context="ead:ead"> <s:assert role="SHOULD" test="not(@level = 'subseries') or parent::*[@level = 'subseries' or @level = 'series']">subseries SHOULD be a child of another subseries or a series</s:assert> </s:rule>

Datatype

Legal values are: **class**

collection

fonds

item

otherlevel

recordgrp

series

subfonds

subgrp

subseries

file

type can be used to categorize the finding aid as an inventory, register, or other format.

Derived from att.typed

Status Optional

Datatype

Contained by EAD: ead

May contain EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist dao daogrp descgrp did dsc fileplan note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial runner scopecontent separatedmaterial userestrict

Note The Descriptive Identification <did> element is required to appear in <archdesc> before presenting more detailed descriptions in <bioghist>, <scopecontent>, and <dsc>, in order to provide first a basic description of the archival materials.

Schematron This constraint exists only for technical reasons. Without the declaration of the EAD namespace, the transformation in relaxNG wouldn't work.
<s:ns prefix="ead" url="urn:isbn:1-931666-22-9"/>

Schematron This constraint exists only for technical reasons. Without the declaration of the TEI namespace, the transformation in relaxNG wouldn't work.
<s:ns prefix="tei" url="http://www.tei-c.org/ns/1.0"/>

Schematron	<archdesc> MUST have a *level* attribute. <s:rule context="ead:archdesc"> <s:assert role="MUST" test="@level">archdesc MUST have a level-attribute</s:assert> </s:rule>
Schematron	The value of the <archdesc> *level* attribute SHOULD be limited to four values: <s:rule context="ead:archdesc"> <s:assert role="COULD" test="@level = 'fonds' or @level = 'recordGrp' or @level = 'collection' or @level='otherlevel'">The value of the archdesc level attribute SHOULD be 'fonds', 'recordGrp', 'collection' ot 'otherlevel'.</s:assert> </s:rule>
Schematron	<archdesc>should contain a non-empty <origination> element. <s:rule context="ead:archdesc"> <s:assert role="SHOULD" test="ead:did/ead:origination and normalize-space(ead:did/ead:origination)">archdesc SHOULD have a non-empty origination</s:assert> </s:rule>
Schematron	If <archdesc> should contain a non-empty <processinfo> element. <s:rule context="ead:archdesc"> <s:assert role="SHOULD" test="normalize-space(ead:processinfo)">archdesc-processinfo SHOULD not be empty</s:assert> </s:rule>
Schematron	The <processinfo> element SHOULD contain a <date> element as descendant. <s:rule context="ead:archdesc"> <s:assert role="SHOULD" test="normalize-space(ead:processinfo/ead:p/ead:date)">archdesc-processinfo SHOULD have a non empty date</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <langmaterial> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:did/ead:langmaterial">archdesc COULD have a langmaterial</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <custodhist> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:custodhist">archdesc COULD have a custodhist</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <otherfindaid> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:otherfindaid">archdesc COULD have an otherfindaid</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <originalsloc> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:originalsloc">archdesc COULD have an originalsloc</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <altformavail> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:altformavail">archdesc COULD have an altformavail</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <bibliography> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:bibliography">archdesc COULD have a bibliography</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <odd> element <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:odd">archdesc COULD have an odd</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <note> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:note">archdesc COULD have a note</s:assert> </s:rule>
Schematron	The <archdesc> element COULD contain a <controlaccess> element. <s:rule context="ead:archdesc"> <s:assert role="COULD" test="ead:controlaccess">archdesc COULD have a controlaccess</s:assert> </s:rule>
Schematron	A <scopecontent> element SHOULD be present in the description at least in

<archdesc>, if not in the <c> elements.
<s:rule context="ead:archdesc" role="SHOULD"> <s:assert test="ead:scopecontent or ead:dsc/ead:c01/descendant-or-self::ead:scopecontent">a scopecontent element SHOULD be present at least in archdesc if not in the c elements</s:assert>
</s:rule>

Content model

<content/>

Schema Declaration

```
element archdesc
{
   att.EADGlobal.attributes,
   att.relatedencoding.attributes,
   att.desc.c.attribute.otherlevel,
   attribute level
   {
      "class"
    | "collection"
    | "fonds"
    | "item"
    | "otherlevel"
    | "recordgrp"
    | "series"
    | "subfonds"
    | "subgrp"
    | "subseries"
    | "file"
   }
   >>
   tei:constraintSpec
   [
      ident = "otherlevel"
      scheme = "isoschematron"
      type = "EHRI"
      mode = "add"
      "If the attribute "
      "level"
      """ has the value 'otherlevel', an attribute """
      "otherlevel"
      " MUST be added"
      """If the attribute level has the value 'otherlevel', an attribute otherlevel MUST be a
dded"""
   ]
   >>
   tei:constraintSpec
   [
      ident = "levelFonds"
      scheme = "isoschematron"
      type = "EHRI"
      mode = "add"
      "The "
      "<archdesc>"
```

```
    " element can have for "
    "level"
    """ the value 'fonds', not the subcomponents, """
    "<c01>"
    " to "
    "<c06>"
    """The archdesc can have for level the value 'fonds", not the subcomponents."""
  ]
  >>
  tei:constraintSpec
  [
    ident = "recordgrplevel"
    scheme = "isoschematron"
    type = "EHRI"
    mode = "add"
    "A component with "
    "level"
    """="recordgrp" SHOULD be a child of another component with """
    "level"
    """="recordgrp"""""
    "recordgrp SHOULD be a child of another recordgrp"
  ]
  >>
  tei:constraintSpec
  [
    ident = "subgrpLevel"
    scheme = "isoschematron"
    type = "EHRI"
    mode = "add"
    "A component with "
    "level"
    """="subgrp" SHOULD be a child of another component with """
    "level"
    """="subgrp" or "recordgrp"""""
    "subgrp SHOULD be a child of another subgrp or a recordgrp"
  ]
  >>
  tei:constraintSpec
  [
    ident = "subseriesLevel"
    scheme = "isoschematron"
    type = "EHRI"
    mode = "add"
    "A component with "
    "level"
    """="subseries" SHOULD be a child of another component with """
    "level"
    """="subseries" or "series"""""
    "subseries SHOULD be a child of another subseries or a series"
  ],
  attribute type { data.enumerated }?,
  ( runner*, did, model.desc.full* )
```

}

<archdescgrp>

<archdescgrp> (Archival Description Group) A wrapper element used only within <eadgrp> in the EAD Group Document Type Definition. The <archdescgrp> summarizes the content, context, and extent of the archival materials described in separate EAD documents bundled within the <dscgrp> subelement. The <archdescgrp> may contain all data elements available in <archdesc>, except for <dsc>; the <dscgrp> subelement fills the role of <dsc>. As with <archdesc>, a Descriptive Identification <did> element is required to appear in <archdescgrp> before presenting more detailed descriptions in such elements as <bioghist>.

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.relatedencoding (@*relatedencoding*) att.desc.c (@*level*, @*otherlevel*)

Contained by —

May contain EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist dao daogrp descgrp did dsc fileplan note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial runner scopecontent separatedmaterial userestrict

Note See also the <eadgrp> element.

Content model

<content>
</content>

Schema Declaration

element archdescgrp
{
  att.EADGlobal.attributes,
  att.relatedencoding.attributes,
  att.desc.c.attributes,
  (runner*, did, model.desc.full*, dscgrp)
}

<archref>

<archref> (Archival Reference) A reference element that provides a citation and/or an electronic link to separately described archival materials of special interest. Examples of such materials include a record group and one of its large series (which might have separate EAD-encoded finding aids) and a general reference to a collection with similar content.

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.roled (@*role*) att.xlink (@*label*, @*href*, @*type*, @*title*, @*from*, @*to*, @*role*, @*actuate*, @*show*, @*arcrole*, @*xpointer*, @*entityref*, @*target*, @*parent*)

Member of model.refs

Contained by EAD: abstract bibliography bibref creation descrules dimensions emph entry event extref item label langmaterial langusage materialspec origination otherfindaid p physdesc physfacet physloc ref relatedmaterial repository separatedmaterial unitdate unitid unittitle

May contain EAD: abbr abstract bibref container dao daogrp emph expan extptr extref langmaterial lb materialspec note origination physdesc physloc ptr ref repository title unitdate unitid unittitle

Note The <archref> element can be helpful in several situations. It can be used, with the

HREF or ENTITYREF attribute, for linking to another EAD instance. The <archref> element can also be used to cite archival materials within a <bibliography>, <relatedmaterial>, or <separatedmaterial> element. The <archref> may contain just text or some of the content-specific elements such as <origination>, <repository>, and <unittitle> to identify the different kinds of information in a citation.Do not confuse <archref> with the Bibliographic Reference <bibref> element, which is used to cite works that are published entities or individual items that are not usefully designated as archival materials.

While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<relatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <head>Related Collections</head>
 <archref>
  <unitid>BANC PIC 19xx.055--ffALB</unitid>,
 <unittitle>
   <title>Photographs Taken During the U.S.
      Geological Surveys West of the 100th Meridian,
      1871-1873</title>, by Timothy H. O'Sullivan and
     William Bell</unittitle>
 </archref>
 <archref>
  <unitid>BANC PIC 19xx.089--STER</unitid>,
 <unittitle>
   <title>Stereoviews of the U.S.
      Geographical Survey Expedition West of the 100th
     Meridian of 1871</title>, by Timothy H.
     O'Sullivan</unittitle>
 </archref>
 <archref>
  <unitid>BANC PIC 19xx.273--PIC</unitid>,
 <unittitle>Geographical Surveys West of the 100th
     Meridian (U.S.). <title>New Mexico Photographs from the
      1873 Geographical Survey West of the 100th
      Meridian</title>
  </unittitle>
 </archref>
 <archref>
  <unitid>BANC PIC 1905.17116-.17119--STER</unitid>,
 <unittitle>
   <title>Western Survey Expeditions of
      1871, 1872, 1873, and 1874 </title>, by Timothy H.
     O'Sullivan and William Bell</unittitle>
 </archref>
</relatedmaterial>
```

Content model

```
<content>
</content>
```

Schema

Declaration
```
element archref
{
   att.EADGlobal.attributes,
   att.roled.attributes,
   att.xlink.attributes,
   (
      text
    | model.phrase.basic.norefs
    | bibref
    | ref
    | title
    | extref
    | model.did
   )*
}
```

<arrangement>

<arrangement> (Arrangement) Information on how the described materials have been subdivided into smaller units, e.g., record groups into series, identifying the logical or physical groupings within a hierarchical structure. Can also be used to express the filing sequence of the described materials, such as the principle characteristics of the internal structure, or the physical or logical ordering of materials, including alphabetical, chronological, geographical, office of origin, and other schemes. Identifying logical groupings and the arrangement pattern may enhance retrieval by researchers.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp arrangement c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp scopecontent

May contain EAD: address arrangement blockquote chronlist head list note p table

Note The <arrangement> element may occur within <archdesc> and <c> or as a subelement of <scopecontent>.The <arrangement> element is comparable to ISAD(G) data element 3.3.4 and MARC field 351. The ENCODINGANALOG attribute may be used to differentiate between the 351 subfield a (organization) and subfield b (arrangement).

Example
```
<arrangement xmlns="urn:isbn:1-931666-22-9">
 <head>Arrangement of the Collection</head>
 <p>The filing system for the Braman Collection has been kept
   substantially in its original form. That is, original
   folders and their titles have been retained. The processor
   devised the basic organization scheme for the collection
   and, where necessary, reorganized the papers within the
   various component groups.</p>
</arrangement>
```

Example
```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>
  <unittitle>Research files</unittitle>
  <unitdate type="inclusive"
   normal="1887/1995">1887-1995</unitdate>
  <physdesc>
   <extent>3.5 linear feet (4 boxes)</extent>
```

```
 </physdesc>
</did>
<scopecontent>
 <p>This series consists of newspaper clippings and research
    notes of Fred Reed, pertaining to the Champlain
    Transportation Company, its vessels, and the vessels'
    crew members. Several of the folders of chronological
    clippings include subjects, such as the move of the
    Ticonderoga (1954-1955) and the sale of the Champlain
    Transportation Company (1966). A number of clippings
    under "Persons" are obituaries. Two folders under the
    subseries "Notes" contain handwritten notes by Fred Reed
    broadly pertaining to the history of the Champlain
    Transportation Company, including a chronology, a list
    of crew members, and information about the Company's
    vessels.</p>
 <arrangement>
  <p>Organized into three subseries: <list type="simple">
    <item>Clippings--chronological</item>
    <item>Clippings--persons</item>
    <item>Notes</item>
   </list>
  </p>
  <p>"Clippings-persons" is arranged alphabetically by
      surname, and "Notes" alphabetically by subject.</p>
 </arrangement>
</scopecontent>
</c01>
```

Example

```
<c03 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle id="bruce.A.2.3">Letters from various
    correspondents to Craufurd Bruce</unittitle>
  <unitdate normal="1807/1819">1807-19</unitdate>
  <unitid>MS. Eng. c. 5746</unitid>
  <physdesc>
   <extent>126 leaves</extent>
  </physdesc>
 </did>
 <arrangement>
  <p>Alphabetical, Grey - Peterkin</p>
 </arrangement>
 <scopecontent>
  <p>Mainly relating to Michael Bruce, with drafts of a few
    letters from Craufurd Bruce.</p>
 </scopecontent>
</c03>
```

Content model

```
<content>
</content>
```

Schema Declaration element arrangement

```
{
  att.EADGlobal.attributes,
  head?,
  ( model.blocks | arrangement )+
}
```

<author>

<author> (Author) Name(s) of institution(s) or individual(s) responsible for compiling the intellectual content of the finding aid. May include a brief statement indicating the nature of the responsibility, for example, archivist, collections processor, or records manager. Because acknowledgment of such individuals or institutions often appears on the title page of a finding aid, the <author> element is available in both the required <titlestmt> portion of the <eadheader> and the optional <titlepage> element in <frontmatter>.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: titlepage titlestmt
May contain	EAD: emph extptr lb ptr
Note	Use the <creation> element found under <profiledesc> to designate the encoder of the finding aid. Use the <persname> or <corpname> element with the ROLE attribute to designate the author in a Bibliographic Reference <bibref> citation. Use the <origination> element to designate the compiler, collector, or creator of the materials being described.
Example	<filedesc xmlns="urn:isbn:1-931666-22-9"> <titlestmt> <titleproper>Register of the Rhea Higbee Wakeling Collection</titleproper> <author>The print and machine readable finding aids for this collection were created by the Special Collections staff, Gerald R. Sherratt Library.</author> </titlestmt> </filedesc>
Example	<frontmatter xmlns="urn:isbn:1-931666-22-9"> <titlepage> <titleproper>Indians Overseas</titleproper> <subtitle>A guide to source materials in the India Office Records for the study of Indian emigration, 1830-1950</subtitle> <author>Timothy N. Thomas</author> <publisher>THE BRITISH LIBRARY<extptr entityref="plachold"/> </publisher> <date>1985</date> </titlepage> </frontmatter>
Content model	<content> </content>
Schema Declaration	element author { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<bibliography>

<bibliography> (Bibliography) Citations to works that are based on, about, or of special value when using the materials being described, or works in which a citation to or brief description of the materials is available. The works could be books, articles, television programs, unpublished reports, web sites, or other forms of information. The <bibliography> may be a simple <list>, a list of both Bibliographic References <bibref> and Archival References <archref>, or a series of Paragraphs .

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp bibliography c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp
May contain	EAD: address archref bibliography bibref blockquote chronlist extref head linkgrp list note p ref subtitle table title
Note	The <bibref> element may be used to designate single citations within Paragraphs without opening the <bibliography> element.In EAD Version 1.0 <bibliography> was a subelement of Adjunct Descriptive Data <add>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <add> when converting finding aids encoded in EAD V1.0 to EAD 2002. The <bibliography> element is comparable to ISAD(G) data element 3.5.4 and MARC fields 510 and 581.
Example	<bibliography xmlns="urn:isbn:1-931666-22-9"> <head>Bibliography</head> Sources consulted by John Kobler. <bibliography> <head>Monographs</head> <bibref> <title render="italic">Affiches americaines</title>. San Domingo: Imprimerie royale du Cap, 1782. Nos. 30, 35.</bibref> <bibref>Ardouin, Charles Nicholas Celigny. <title render="italic">Essais sur l'histoire d'Haiti</title>. Port-au-Prince, 1865.</bibref> <bibref>Bastien, Remy. <title render="italic">Anthologie du folklore haitien</title>, <title render="doublequote">Proverbes</title>. Mexico, 1946. pp.83-91.</bibref> <bibref>Bellegarde, Dantes. <title render="italic"> Dessalines a parle</title>. Port-au-Prince, 1948. Chap. IV: pp. 47-54.</bibref> </bibliography> <bibliography> <head>Serial publications</head> . . . </bibliography> </bibliography>
Content model	<content> </content>

Schema Declaration

```
element bibliography
{
   att.EADGlobal.attributes,
   ( head?, ( model.blocks | model.refs | bibliography )+ )
}
```

<bibref>

<bibref> (Bibliographic Reference) A reference element that provides a citation and/or electronic link for a published work such as a book, article, dissertation, motion picture, or sound recording. The <bibref> may contain just text or some of the content-specific elements such as <title>, <imprint>, or <edition>, although the latter two elements are unlikely to be used for unpublished works.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.roled (*@role*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.refs

Contained by EAD: abstract archref bibliography creation descrules dimensions emph entry event extref item label langmaterial langusage materialspec origination otherfindaid p physdesc physfacet physloc ref relatedmaterial repository separatedmaterial unitdate unitid unittitle

May contain EAD: abbr archref bibseries corpname edition emph expan extptr extref famname imprint lb name num persname ptr ref title

Note A list of <bibref>s may be gathered into a <bibliography>. A single <bibref> may be part of a Paragraph <p>. Use the HREF or ENTITYREF attribute to point to an electronic bibliographic work.Use the more specific <archref> element to cite or link to separately described archival materials.
Do not confuse with the Reference <ref> element, which is an internal link from one place in a finding aid to another place in the same finding aid.
While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<p xmlns="urn:isbn:1-931666-22-9">The Archibald MacLeish Papers are
 described in <bibref>
  <title render="italic">Library of Congress Acquisitions:
     Manuscript Division, 1982, </title> p. 29. </bibref>
</p>
```

Example

```
<bibliography xmlns="urn:isbn:1-931666-22-9">
 <head>Bibliography</head>
 <p>Sources consulted by John Kobler.</p>
 <bibref>
  <title render="italic">Affiches americaines</title>. San
   Domingo: Imprimerie royale du Cap, 1782. Nos. 30,
   35.</bibref>
 <bibref>Ardouin, Charles Nicholas Celigny. <title render="italic">Essais sur l'h
istoire d'Haiti</title>.
   Port-au-Prince, 1865.</bibref>
```

```
<bibref>Bastien, Remy. <title render="italic">Anthologie du
   folklore haitien</title>, <title render="doublequote"> Proverbes</title>. Mexi
co, 1946. pp.83-91.</bibref>
<bibref>Bellegarde, Dantes. <title render="italic">Dessalines a
   parle</title>. Port-au-Prince, 1948. Chap. IV: pp.
  47-54.</bibref> . . . </bibliography>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element bibref
{
  att.EADGlobal.attributes,
  att.roled.attributes,
  att.xlink.attributes,
  (
    text
   | model.phrase.basic.norefs
   | edition
   | imprint
   | name
   | num
   | bibseries
   | ref
   | title
   | famname
   | persname
   | corpname
   | extref
   | archref
  )*
}
```

<bibseries>

<bibseries> (Bibliographic Series) Information about the published series in which a book, encoded finding aid, or other published work has appeared. Refers to monographic series only. Not to be used for archival series.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: bibref titlepage unittitle

May contain EAD: emph extptr lb num ptr title

Example

```
<frontmatter xmlns="urn:isbn:1-931666-22-9">
 <titlepage>
  <bibseries>Guides to Special Collections in the Music
     Division of the Library of Congress</bibseries>
  <titleproper>Irving Fine Collection</titleproper>
 </titlepage>
</frontmatter>
```

Example

```
<bibliography xmlns="urn:isbn:1-931666-22-9">
 <head>Selected Bibliography of History of the Harvard University
```

```
  Department of Physics</head>
 <bibref>
  <persname>Morton, Charles</persname>. <title>Compendium
    Physicae</title>. <imprint> [<geogname>Boston
   </geogname>: <publisher>Colonial Society of
      Massachusetts, </publisher>
   <date normal="1940">1940</date>].</imprint>
  <bibseries>Colonial Society of Massachusetts. Publications ;
  <num>v. 33</num>.</bibseries>
 </bibref>
</bibliography>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element bibseries
{
  att.EADGlobal.attributes,
  ( text | model.phrase.bare | title | num )*
}
```

<bioghist>

<bioghist> (Biography or History) A concise essay or chronology that places the archival materials in context by providing information about their creator(s). Includes significant information about the life of an individual or family, or the administrative history of a corporate body. The <bioghist> may contain just text in a series of Paragraphs <p>, and/or a Chronology List <chronlist> that matches dates and date ranges with associated events. Additional <bioghist> elements may be nested inside one another when a complex body of materials, such as a collection of family papers, is being described, and separately headed sections are desired. The <bioghist> element may also be nested to designate a portion of the essay or chronology that might be extracted as a MARC 545 subfield.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp bioghist c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp

May contain EAD: address bioghist blockquote chronlist dao daogrp head list note p table

Note Many elements, such as <bioghist> are recursive (i.e., the elements are available within themselves) to facilitate the use of multiple headings with subdivided descriptions for complex collections, and to enable EAD markup to be used for a variety of output. In Example 1 below, <bioghist> is repeated within itself to enable the extraction of a brief biographical note for a MARC record.The <bioghist> element is comparable to ISAD(G) data element 3.2.2 and MARC field 545.

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Administrative History</head>
 <bioghist encodinganalog="545$a">
  <p id="PRO123">In October 1964 the incoming Labour
    government created new office of Secretary of State for
    Economic Affairs (combined with First Secretary of
```

```
      State) and set up the Department of Economic Affairs
      under the Ministers of the Crown Act 1964 to carry
      primary responsibility for long term economic
      planning.</p>
    </bioghist>
    <p>Under the Act the posts of Economic Secretary to the Treasury
      and Secretary of State for Industry, Trade and Regional
      Development were abolished.</p>
    <p>George Brown was appointed as First Secretary of State and
      Secretary of</p>
    <p>Composition of DEA: most of Treasury's National Economy Group
      (excluding the short term forecasting team); economic
      planning staff from the National Economic Development Office
      (NEDO); the regional policy divisions from the Board of
      Trade; a team of industrial experts.</p>
    <p>DEA charged with duty of formulating, with both sides of
      industry, a National Plan (published in September 1965),
      co-ordinating the work of other departments in implementing
      policies of economic growth, particularly in the fields of
      industry, the regions, and prices and incomes.</p> . . .
  </bioghist>
```

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Chronology</head>
 <chronlist>
  <chronitem>
   <date normal="18401012">1840</date>
   <event>Born Helena Opid in Krakow, Poland on October
      12th.</event>
  </chronitem>
  <chronitem>
   <date normal="1861">1861</date>
   <event>Made stage debut as Helena Modrzejewska in
      charity fair production of <title>The White
      Camellia</title>, in Bochnia, Poland.</event>
  </chronitem> . . . <chronitem>
   <date normal="19090409">1909</date>
   <event>Died April 8th at her home on Bay Island. Funeral
      services held at St. Vibiana's Cathedral in Los
      Angeles, and Modjeska was later buried in her native
      Krakow.</event>
  </chronitem>
 </chronlist>
</bioghist>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element bioghist
{
   att.EADGlobal.attributes,
   head?,
```

```
    ( model.blocks | bioghist | dao | daogrp )+
}
```

<blockquote>

<blockquote> (Block Quote) A formatting element that designates an extended quotation. The quotation is set off from the text by spacing or other typographic distinction.

Module	EAD
Attributes	att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*)
Member of	model.inter
Contained by	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist daodesc descgrp div dsc dscgroup event extrefloc index item note odd originalsloc otherfindaid p phystech prefercite processinfo ref refloc relatedmaterial scopecontent separatedmaterial userestrict
May contain	EAD: address chronlist list note p table
Note	Use the Emphasis <emph> element, not <blockquote>, to tag words that are set off with quotations for emphasis or as a small quoted phrase that occurs, "as these words do," in the line of text.

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Administrative History</head>
 <p>The Brewster presidential administration's primary objective
   was to raise academic standards comprehensively throughout
   Yale University. This required the substantial revision of
   certain existing policies and disciplines, as well as the
   development of new programs, schools, and departments.</p>
 <p>President Brewster began this process in the 1960s by
   significantly increasing the size of the faculty and by
   actively recruiting renowned non-Yale scholars to fill the
   positions. According to Brewster, previous Yale
   administrations tended to overlook high caliber academicians
   who graduated and specialized outside the university. . .
   .</p>
 <p>As the size of the Yale faculty increased, Brewster's new
   admissions policies caused the make up of the undergraduate
   body to shift. By the early 1960s, most undergraduates had
   prepared at private schools, and many were sons of Yale
   alumni. As with the faculty, Brewster felt that Yale was
   consistently overlooking some of the best intellectual
   student talent necessary to maintain the highest levels of
   academic excellence. In a 1965 speech to alumni, Brewster
   summarized his administration's revised recruitment policy
   by stating that Yale would only seek students <blockquote>
   <p>whose capacity for intellectual achievement is
      outstanding and who also have the motivation to put
      their intellectual capacities to creatively
      influential use, in thought, in art, in science, or
      in the exercise of public or private or professional
      responsibility.</p>
 </blockquote>
 </p> . . . </bioghist>
```

Content model

<content>
</content>

Schema Declaration element blockquote { att.EADGlobal.attributes, (model.inter.noquote | p)+ }

<c>

<c> (Component (Unnumbered)) A wrapper element that designates a subordinate part of the materials being described. A Component <c> provides information about the content, context, and extent of a subordinate body of materials. It is always nested within a Description of Subordinate Components <dsc> and often within another <c> element. Each <c> element identifies an intellectually logical section of the described materials. The physical filing separations between components do not always coincide with the intellectual separations. For example, a <c> that designates dramatic works might end in the same box in which the next <c> begins with short stories. Also, not every <c> directly corresponds to a folder or other physical entity. Some <c> elements simply represent a stage within a hierarchical description.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)

Contained by EAD: c dsc

May contain EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict

Note Components may be subdivided into smaller and smaller components and may eventually reach the level of a single item. For example, the components of a collection may be series, components of series may be subseries, components of subseries may be files, and components of files may be items. A component may be either an unnumbered <c> or a numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.Use the LEVEL attribute to identify the descriptive character of the component, for example, "series," "subseries," "subfonds," "subgrp," "file," or "item." Assigning a LEVEL attribute for the highest <c> is recommended; thereafter the attribute may be used when the repository deems it useful.

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="combined">
 <c level="series">
  <did>
   <unitid>Series 1</unitid>
   <unittitle>Correspondence</unittitle>
  </did>
  <scopecontent>[...]</scopecontent>
  <c level="subseries">
   <did>
    <unitid>Subseries 1.1</unitid>
    <unittitle>Outgoing Correspondence</unittitle>
   </did>
   <c level="file">
    <did>
     <unittitle>Abbinger-Aldrich</unittitle>
    </did>
```

```
  </c> . . . </c>
 <c level="subseries">
  <did>
   <unitid>Subseries 1.2</unitid>
   <unittitle>Incoming Correspondence</unittitle>
  </did>
  <c level="file">
   <did>
    <unittitle>Adams-Ayers</unittitle>
   </did>
  </c> . . . </c>
 </c>
</dsc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element c
{
   att.EADGlobal.attributes,
   att.desc.c.attributes,
   head?,
   did,
   model.desc.full*,
   ( thead?, c+ )*
}
```

<c01>

<c01> (Component (First Level)) A wrapper element that designates the top or first-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: dsc
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c02 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	The LEVEL attribute is used to identify which level of description the <c01> covers, e.g., "series," "subseries," "file," or "item." Do not expect that all elements at the same numbered component designation represent the same level of description. The <c01> element can start at different levels of description in different finding aids, and, the quantity of hierarchical components can vary between, for example, a "series" and a "file." For example, a <c03> element could represent a "file" in one part of a finding aid, and in another part of the finding aid, a file might be a <c05> element because additional hierarchical groupings were needed to categorize the materials being described.See the description under Component <c> for additional

information.

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="combined">
 <c01 level="series">
  <did>
   <unittitle>Topical Files</unittitle>
   <unitdate normal="1918/1945">1918-1945</unitdate>
  </did>
  <scopecontent>[...]</scopecontent>
  <c02 level="file">
   <did>
    <unittitle>California Dining Club</unittitle>
   </did>
   <c03 level="file">
    <did>
     <unittitle>Annual financial statements</unittitle>
     <unitdate type="inclusive"
      normal="1923/1929">1923-1929</unitdate>
    </did>
   </c03>
   <c03 level="file">
    <did>
     <unittitle>Membership rosters</unittitle>
     <unitdate type="inclusive"
      normal="1918/1932">1918-1932</unitdate>
    </did>
   </c03>
   <c03 level="file">
    <did>
     <unittitle>Minutes</unittitle>
     <unitdate type="inclusive"
      normal="1925/1930">1925-1930</unitdate>
    </did>
   </c03>
   <c03 level="file">
    <did>
     <unittitle>Newsletters</unittitle>
     <unitdate type="inclusive"
      normal="1919/1932">1919-1932</unitdate>
    </did>
   </c03>
  </c02> . . . </c01>
</dsc>
```

Schematron

<c01> MUST have a *level* attribute.

```
<s:rule context="ead:c01"> <s:assert role="MUST" test="@level">c01 MUST
have a level-attribute</s:assert> </s:rule>
```

Content model

```
<content/>
```

Schema Declaration

```
element c01
{
   att.EADGlobal.attributes,
```

```
  att.desc.c.attributes,
  head?, did,
  model.desc.full*,
  ( thead?, c02+ )*
}
```

<c02>

<c02> (Component (Second Level)) A wrapper element that designates a second-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c01
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c03 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	<c02> MUST have a *level* attribute. <s:rule context="ead:c02"> <s:assert role="MUST" test="@level">c02 MUST have a level-attribute</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c02
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c03+)*
	}

<c03>

<c03> (Component (Third Level)) A wrapper element that designates a third-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c02
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement

	bibliography bioghist c04 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	<c03> MUST have a *level* attribute. <s:rule context="ead:c03"> <s:assert role="MUST" test="@level">c03 MUST have a level-attribute</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c03
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c04+)*
	}

<c04>

<c04> (Component (Fourth Level)) A wrapper element that designates a fourth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c03
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c05 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	<c04> MUST have a *level* attribute. <s:rule context="ead:c04"> <s:assert role="MUST" test="@level">c04 MUST have a level-attribute</s:assert> </s:rule>
Content model	<content/>
Schema Declaration	element c04 { att.EADGlobal.attributes, att.desc.c.attributes, head?,

```
  did,
  model.desc.full*,
  ( thead?, c05+ )*
}
```

<c05>

<c05> (Component (Fifth Level)) A wrapper element that designates a fifth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c04
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c06 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	<c05> MUST have a *level* attribute. <s:rule context="ead:c05"> <s:assert role="MUST" test="@level">c05 MUST have a level-attribute</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c05
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c06+)*
	}

<c06>

<c06> (Component (Sixth Level)) A wrapper element that designates a sixth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c05
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c07 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo

	relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	<c06> MUST have a *level* attribute. <s:rule context="ead:c06"> <s:assert role="MUST" test="@level">c06 MUST have a level-attribute</s:assert> </s:rule>
Schematron	The component elements SHOULD be numbered components between <c01> and <c06> <s:rule context="not(ead:c06)"> <s:assert role="SHOULD" test="ead:c07">c subelements SHOULD be between c01 and c06</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c06
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c07+)*
	}

<c07>

<c07> (Component (Seventh Level)) A wrapper element that designates a seventh-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.desc.c (@*level*, @*otherlevel*)
Contained by	EAD: c06
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c08 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	The component elements SHOULD be numbered components between <c01> and <c06> <s:rule context="not(ead:c07)"> <s:assert role="SHOULD" test="ead:c08">c subelements SHOULD be between c01 and c06</s:assert> </s:rule>
Content model	<content/>
Schema Declaration	element c07 {

att.EADGlobal.attributes,
att.desc.c.attributes,
head?,
did,
model.desc.full*,
(thead?, c08+)*
}

<c08>

<c08> (Component (Eighth Level)) A wrapper element that designates a eighth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c07
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c09 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	The component elements SHOULD be numbered components between <c01> and <c06> <s:rule context="not(ead:c08)"> <s:assert role="SHOULD" test="ead:c09">c subelements SHOULD be between c01 and c06</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c08
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c09+)*
	}

<c09>

<c09> (Component (Ninth Level)) A wrapper element that designates a ninth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)

Contained by	EAD: c08
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c10 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	The component elements SHOULD be numbered components between <c01> and <c06> <s:rule context="not(ead:c09)"> <s:assert role="SHOULD" test="ead:c10">c subelements SHOULD be between c01 and c06</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c09
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c10+)*
	}

<c10>

<c10> (Component (Tenth Level)) A wrapper element that designates a tenth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c09
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c11 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	The component elements SHOULD be numbered components between <c01> and <c06> <s:rule context="not(ead:c10)"> <s:assert role="SHOULD" test="ead:c11">c subelements SHOULD be between c01 and c06</s:assert> </s:rule>
Content model	<content/>
Schema Declaration	element c10

{
att.EADGlobal.attributes,
att.desc.c.attributes,
head?,
did,
model.desc.full*,
(thead?, c11+)*
}

<c11>

<c11> (Component (Eleventh Level)) A wrapper element that designates a eleventh-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c (*@level*, *@otherlevel*)
Contained by	EAD: c10
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c12 controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial thead userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Schematron	The component elements SHOULD be numbered components between <c01> and <c06> <s:rule context="not(ead:c11)"> <s:assert role="SHOULD" test="ead:c12">c subelements SHOULD be between c01 and c06</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element c11
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*,
	(thead?, c12+)*
	}

<c12>

<c12> (Component (Twelfth Level)) A wrapper element that designates a twelfth-level subordinate part of the materials being described. Components may be either unnumbered <c> or numbered <c01>, <c02>, etc. The numbered components <c01> to <c12> assist a finding aid encoder in nesting up to twelve component levels accurately.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.desc.c

	(*@level*, *@otherlevel*)
Contained by	EAD: c11
May contain	EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist dao daogrp descgrp did dsc fileplan head note odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial userestrict
Note	See the description under Component (Unnumbered) <c> and Component (First Level) <c01> for additional information.See examples under <c01> Component (First Level) and in fully encoded examples in Appendix C.
Content model	<content> </content>

Schema Declaration	element c12
	{
	att.EADGlobal.attributes,
	att.desc.c.attributes,
	head?,
	did,
	model.desc.full*
	}

<change>

<change> (Change) An optional subelement in the <revisiondesc> portion of <eadheader> used for a brief description of an update made to an EAD document. Additions to a finding aid or significant recoding should be noted, but not correction of a few typographical errors. The <change> element is modeled on a header element in the Text Encoding Initiative (TEI) DTD. The TEI recommends that revisions be entered and numbered in reverse chronological order, with the most recent <change> first.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: revisiondesc
May contain	EAD: date item
Note	The <edition> element can be used to designate a finding aid that has been so substantively changed that it constitutes a new version and supersedes earlier versions of the finding aid.
Example	<eadheader xmlns="urn:isbn:1-931666-22-9" langencoding="iso639-2b"> . . . revisiondesc> <change> <date normal="19970505">May 5, 1997</date> <item>This electronic finding aid was updated to current markup standards by Sarah Taylor using a perl script. Updates included: eadheader, eadid, and arrangement of did elements and their labels.</item> </change> </revisiondesc> </eadheader>
Schematron	In <revisiondesc>, each <change> element SHOULD contain a <date> element and a <item> element. [This rule has been taken from] <s:rule context="ead:change" role="SHOULD"> <s:assert test=".[ead:date and

ead:item]"> 'revisiondesc/change' element SHOULD contain both a date and an item subelement. </s:assert> </s:rule>

Schematron The <date> element for each <change> in <revisiondesc> SHOULD not be empty
<s:rule context="ead:change"> <s:assert role="SHOULD" test="normalize-space(ead:date)">a revisiondesc/change SHOULD have a not empty date</s:assert> </s:rule>

Content model

<content/>

Schema Declaration element change { att.EADGlobal.attributes, date, item+ }

<chronitem>

<chronitem> (Chronology List Item) A formatting element that keeps a date paired with an associated event or group of events within a Chronology List <chronlist>. Each <chronitem> contains a <date> (either a single date or date range) coupled with an <event> or description of what occurred during that time. When multiple <event>s are associated with a single <date>, the <event>s are bundled in an <eventgrp> tag, which is then easily paired with the appropriate <date>.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: chronlist
May contain EAD: date event eventgrp
Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Chronology</head>
 <chronlist>
  <chronitem>
   <date normal="18401012">1840</date>
   <event>Born Helena Opid in Krakow, Poland on October
      12th.</event>
  </chronitem>
  <chronitem>
   <date normal="1861">1861</date>
   <event>Made stage debut as Helena Modrzejewska in
      charity fair production of <title>The White
        Camellia</title>, in Bochnia, Poland.</event>
  </chronitem> . . . <chronitem>
   <date normal="19090409">1909</date>
   <event>Died April 8th at her home on Bay Island. Funeral
      services held at St. Vibiana's Cathedral in Los
      Angeles, and Modjeska was later buried in her native
      Krakow.</event>
  </chronitem>
 </chronlist>
</bioghist>
```

Content model

<content>
</content>

Schema

Declaration element chronitem { att.EADGlobal.attributes, date, (event | eventgrp) }

<chronlist>

<chronlist> (Chronology List) A formatting element that designates information about the sequence in which significant past events, associated with the described materials, occurred. The <chronlist> also provides a structured display to list these dates and events. Each <chronlist> contains Chronology Items <chronitem>s that pair a <date> or date range with a brief description of an associated <event> or events <eventgrp>.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.inter.noquote

Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist blockquote controlaccess custodhist daodesc descgrp div dsc dscgroup event extrefloc index item note odd originalsloc otherfindaid p phystech prefercite processinfo ref refloc relatedmaterial scopecontent separatedmaterial userestrict

May contain EAD: chronitem head listhead

Note A <chronlist> most often appears in finding aids as part of the Biography or History <bioghist> element, but <chronlist> is also available for use in other elements that might need to present historical dates and events in a multicolumn list.

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Biographical Note</head>
 <chronlist>
  <chronitem>
   <date>1820, Dec. 20</date>
   <event>Born eighth of ten children of Taylor and Dicey
      (Jones) Duke; Little River, Orange Co., N.C.</event>
  </chronitem>
  <chronitem>
   <date>1842</date>
   <event>Married Mary Caroline Clinton</event>
  </chronitem>
  <chronitem>
   <date>1844</date>
   <event>Sidney Taylor Duke born</event>
  </chronitem> . . . </chronlist>
</bioghist>
```

Content model

```
<content>
</content>
```

Schema Declaration element chronlist { att.EADGlobal.attributes, head?, listhead?, chronitem+ }

<colspec/>

<colspec/> (Table Column Specification) An empty formatting element that designates the position and size of a single column in a Table <table>. Attributes specify the unique name of the column, its unique number within the table, its width and rules, and the horizontal alignment of text within the column. The quantity of columns in a <table> is determined by the COLS attribute of the

<tgroup> element, not by the number of <colspec/>s defined. The values set for <colspec/> override any values implied from <tgroup> or <thead> elements.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

colnum	**Status**	Optional
	Datatype	
colname	**Status**	Optional
	Datatype	
colwidth	**Status**	Optional
	Datatype	
colsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**
		O
rowsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**
		O
align	**Status**	Optional
	Datatype	
	Legal values are:	**left**
		right
		center
		justify
		char
char	**Status**	Optional
	Datatype	
charoff	**Status**	Optional
	Datatype	

Contained by EAD: tgroup

May contain Empty element

Note See also related elements <table> and <tgroup>.

Example

```
<table xmlns="urn:isbn:1-931666-22-9" frame="none">
 <tgroup cols="3">
  <colspec colnum="1" colname="1"
   align="left" colwidth="50pt"/>
  <colspec colnum="2" colname="2"
   align="left" colwidth="50pt"/>
  <colspec colnum="3" colname="3"
   align="left" colwidth="50pt"/>
  <thead>
   <row>
    <entry colname="1">Major Family Members</entry>
```

```
    <entry colname="2">Spouses</entry>
    <entry colname="3">Children</entry>
   </row>
  </thead>
  <tbody>
   <row>
    <entry colname="1">John Albemarle
        (1760-1806)</entry>
    <entry colname="2">Mary Frances Delaney
        (1769-1835)</entry>
    <entry colname="3">John Delaney Albemarle
        (1787-1848)</entry>
   </row> . . . </tbody>
 </tgroup>
</table>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element colspec
{
   att.EADGlobal.attributes,
   attribute colnum { xsd:NMTOKEN }?,
   attribute colname { xsd:NMTOKEN }?,
   attribute colwidth { text }?,
   attribute colsep { "1" | "O" }?,
   attribute rowsep { "1" | "O" }?,
   attribute align { "left" | "right" | "center" | "justify" | "char" }?,
   attribute char { text }?,
   attribute charoff { xsd:NMTOKEN }?,
   empty
}
```

<container>

<container> (Container) A <did> subelement for information that contributes to locating the described materials by indicating the kinds of devices that hold the materials and identifying any sequential numbers assigned to those devices. The <container> element is used most frequently at the component level, i.e., once a Description of Subordinate Components <dsc> has been opened. This storage information can help researchers understand how extensive the material is, especially in the absence of a specific physical <extent> statement at the component level.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.labeled (*@label*)

parent	**Status**	Optional	
	Datatype		

Member of model.did

Contained by EAD: archref did

May contain EAD: emph extptr lb ptr

Note Use of the TYPE attribute is strongly recommended to clarify the nature of the storage device. Use any useful designations, such as "box," "folder," and

"reel."The Physical Location <physloc> element can be used to designate the shelves, stacks, rooms, buildings, or other places where the containers are stored.
Use the ID of the Unit <unitid> element to designate control numbers not associated with a physical container, for example, accession numbers. Most repositories use either <container> or <unitid> as the call numbers for fetching material for researchers. If both elements are used, consider setting the LABEL attribute to specify which element is the call number.
The PARENT attribute can be used to point to the <container> element that describes the box in which a folder is housed.

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="combined">
 <c level="series">
  <did>
   <unittitle>Correspondence, </unittitle>
   <unitdate normal="1942/1987">1942-1987 </unitdate>
  </did>
  <scopecontent>[...]</scopecontent>
  <c level="file">
   <did>
    <container id="mss1993-043.1.1"
     type="box">1</container>
    <container parent="mss1993-043.1.1"
     type="folder">1</container>
    <unittitle>
     <unitdate normal="1942/1943">1942-1943</unitdate>
    </unittitle>
   </did>
  </c>
  <c level="file">
   <did>
    <container parent="mss1993-043.1.1"
     type="folder">2</container>
    <unittitle>
     <unitdate normal="194401/194408">January-August 1944</unitdate>
    </unittitle>
   </did>
  </c>
  <c level="file">
   <did>
    <container parent="mss1993-043.1.1"
     type="folder">3</container>
    <unittitle>
     <unitdate normal="194409/194503">August
          1944-March 1945</unitdate>
    </unittitle>
   </did>
  </c> . . . </c> . . . </dsc>
```

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>[...]</did>
 <c02 level="file">
  <did>
   <container type="box">3</container>
```

```
  <container type="folder">18</container>
  <unittitle>Parent-Teacher Association of Fondsville </unittitle>
  <unitdate type="inclusive"
   normal="1959/1972">1959-1972</unitdate>
 </did>
</c02>
<c02 level="file">
 <did>
  <container type="box">3</container>
  <container type="folder">19</container>
  <unittitle>Pasta and Politics Club</unittitle>
  <unitdate type="inclusive"
   normal="1967/1975">1967-1975</unitdate>
 </did>
</c02> . . . </c01>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element container
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.labeled.attributes,
   attribute parent { xsd:IDREFS }?,
   ( text | model.phrase.bare )*
}
```

<controlaccess>

<controlaccess> (Controlled Access Headings) A wrapper element that designates key access points for the described materials and enables authority-controlled searching across finding aids on a computer network. Hundreds of names and subjects can appear in a finding aid. Prominence can be given to the major ones by bundling them together in a single place within the <archdesc> or within a large Component <c> and tagging them with <controlaccess>.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 controlaccess descgrp
May contain	EAD: address blockquote chronlist controlaccess corpname famname function genreform geogname head list name note occupation p persname subject subtitle table title
Note	The <controlaccess> element designates terms comparable to those found in the 1xx, 6xx, and 7xx fields of MARC catalog records. Finding aid searches limited to the <controlaccess> element and its subelements will improve the likelihood of locating strong sources of information on a desired subject, because access terms will have been entered in a consistent form across finding aids, and also because only the most significant terms are likely to have been selected for encoding.Although names and terms from locally controlled vocabularies are permissible, the <controlaccess> subelements (<corpname>,

<famname>, <function>, <genreform>, <geogname>, <occupation>, <persname>, <subject>, and <title>) should come from national or international vocabularies whenever they are available to enable searches in information systems that include multiple finding aids, or finding aids and bibliographic records from many institutions.
These subelements have SOURCE attributes to specify the vocabulary tool from which the heading is taken and RULES attributes to specify the descriptive rules by which it has been formulated. The attribute AUTHFILENUMBER can be used to identify an authority file record that provides additional information about a heading and includes cross references. The ROLE attribute can be used to specify such factors as whether a heading is for the creator of the materials, the subject of the materials, or both.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>[...]</did>
 <scopecontent>[...]</scopecontent>
 <controlaccess>
  <head>Index Terms</head>
  <p>These records are indexed under the following headings in
     the catalog of the Minnesota Historical Society.
     Researchers wishing to find related materials should
     search the catalog under these index terms.</p>
  <controlaccess>
   <head>Organizations:</head>
   <corpname encodinganalog="610"
    source="lcnaf">Board of
       Game and Fish Commissioners of Minnesota.</corpname>
  </controlaccess>
  <controlaccess>
   <head>Topics:</head>
   <subject encodinganalog="650"
    source="lcsh">Fishery law
       and legislation--Minnesota.</subject>
   <subject encodinganalog="650"
    source="lcsh">Game-law--Minnesota.</subject>
   <subject encodinganalog="650"
    source="lcsh">Law
       enforcement--Minnesota.</subject>
  </controlaccess>
  <controlaccess>
   <head>Government Functions:</head>
   <function encodinganalog="657"
    source="aat">Law
       enforcing.</function>
   <function encodinganalog="657"
    source="aat">Convicting.</function>
  </controlaccess>
 </controlaccess> . . . </archdesc>
```

Schematron

In <controlaccess>, EHRI welcomes any access points types : <subject>, <geogname>, <persname>, <orgname>.

```
<s:rule context="ead:controlaccess">
<s:assert role="COULD" test="ead:subject">controlaccess COULD have one or
more subject elements</s:assert> </s:rule>
```

Schematron	In <controlaccess>, EHRI welcomes any access points types : <subject>, <geogname>, <persname>, <orgname>. <s:rule context="ead:controlaccess"> <s:assert role="COULD" test="ead:geogname">controlaccess COULD have one or more geogname elements</s:assert> </s:rule>
Schematron	In <controlaccess>, EHRI welcomes any access points types : <subject>, <geogname>, <persname>, <orgname>. <s:rule context="ead:controlaccess"> <s:assert role="COULD" test="ead:persname">controlaccess COULD have one or more persname elements</s:assert> </s:rule>
Schematron	In <controlaccess>, EHRI welcomes any access points types : <subject>, <geogname>, <persname>, <orgname>. <s:rule context="ead:controlaccess"> <s:assert role="COULD" test="ead:orgname">controlaccess COULD have one or more orgname elements</s:assert> </s:rule>
Schematron	Access points COULD be chosen in authority lists. The list is declared with a *source* attribute. The related id of this authority should be declared in an *authfilenumber* attribute. Note that EHRI provides URLs for vocabularies and authorities. Check the EHRIwebsite for more information <s:rule context="ead:controlaccess"> <s:assert role="COULD" test=". [@authfilenumber and @source]">Access points COULD be chosen in an authority list. This list should be declared in a @source attribute. The related id of this authority should be declared in an @authfilenumber attribute. </s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element controlaccess
	{
	att.EADGlobal.attributes,
	head?,
	(model.blocks | model.access.title | controlaccess)+
	}

<corpname>

<corpname> (Corporate Name) The proper noun name that identifies an organization or group of people that acts as an entity. Examples include names of associations, institutions, business firms, nonprofit enterprises, governments, government agencies, projects, programs, religious bodies, churches, conferences, athletic contests, exhibitions, expeditions, fairs, and ships.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*) att.roled (*@role*)
Member of	model.access
Contained by	EAD: bibref controlaccess entry event extrefloc indexentry item label namegrp origination p physdesc physfacet ref refloc repository unittitle
May contain	EAD: emph extptr lb ptr subarea
Note	All names in a finding aid do not have to be tagged. One option is to tag those names for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary forms is recommended to facilitate access to names within and across finding aid systems. The <corpname>

element may be used in text elements such as <p>. To indicate a corporate entity with major representation in the described materials, nest <corpname> within the <controlaccess> element.When a <corpname> is also the name of the institution providing intellectual access to the described material, nest <corpname> within the <repository> element. The <subarea> element may be used to show a secondary or subsidiary level within the <corpname>. When a <corpname> is also the name of the creator or compiler of the described material, nest <corpname> within the <origination> element.
The ROLE attribute can be used to specify other relationship(s) of the name to the described materials, for example, "compiler," "creator," "collector," or "subject." The ENCODINGANALOG attribute can be used to specify corresponding data categories in another coding system such as MARC. The NORMAL attribute can be used to provide the authority form of a name that has been encoded with <corpname> in narrative text, e.g., within a paragraph. Use the SOURCE attribute to specify the vocabulary from which the name has been taken, and/or the RULES attribute to specify the descriptive rules followed when forming the name. The attribute AUTHFILENUMBER can be used to identify a link to an authority file record that has more information about the name or cross references for alternative forms of the name and related names.
The <corpname> element is comparable to MARC fields 110, 111, 610, 611, 710, and 711.
See also the related elements <controlaccess>, <persname>, <famname>, <name>, and <subarea>.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>
  <head>Collection Summary</head>
  <origination label="Creator">
   <corpname encodinganalog="110"
    source="lcnaf">National
      Association for the Advancement of Colored
      People</corpname>
  </origination> . . . </did> . . . </archdesc>
```

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Index Terms</head>
 <p>These records are indexed under the following headings in the
   catalog of the Minnesota Historical Society. Researchers
   wishing to find related materials should search the catalog
   under these index terms.</p>
 <controlaccess>
  <head>Organizations:</head>
  <corpname encodinganalog="610"
   source="lcnaf">Board of Game
     and Fish Commissioners of Minnesota.</corpname>
 </controlaccess> . . . </controlaccess>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element corpname
{
  att.EADGlobal.attributes,
```

```
  att.access.attributes,
  att.roled.attributes,
  ( text | model.phrase.bare | subarea )*
}
```

<creation>

<creation> (Creation) A subelement of the <profiledesc> portion of <eadheader> used for information about the encoding of the finding aid, including the person(s) or agency(ies) responsible for the encoding, the date, and the circumstances under which the encoding was done.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: profiledesc
May contain	EAD: abbr archref bibref date emph expan extptr extref lb linkgrp ptr ref subtitle title
Note	This element is modeled on a Text Encoding Initiative (TEI) DTD header element.
Example	<eadheader xmlns="urn:isbn:1-931666-22-9" langencoding="iso639-2b"> . . . <profiledesc> <creation>Machine-readable finding aid and skeletal markup derived via a macro from WordPerfect file; markup checked and completed by Sarah Taylor. <date normal="19950423">April 23, 1995.</date> </creation> </profiledesc> . . . </eadheader>
Content model	

```
<content>
</content>
```

Schema Declaration

```
element creation
{
  att.EADGlobal.attributes,
  ( text | model.phrase.basic | date )*
}
```

<custodhist>

<custodhist> (Custodial History) Information about the chain of ownership of the materials being described, before they reached the immediate source of acquisition. Both physical possession and intellectual ownership can be described, providing details of changes of ownership and/or custody that may be significant in terms of authority, integrity, and interpretation.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 custodhist descgrp
May contain	EAD: acqinfo address blockquote chronlist custodhist head list note p table
Note	Although the history of custody is sometimes synonymous with provenance, a description of archival provenance may be more appropriate for the <origination>, <bioghist>, or <scopecontent> elements.Use Acquisition Information <acqinfo> for text about the immediate source of the described materials and the circumstances under which they were received by the

repository.
In EAD Version 1.0 <custodhist> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.
The <custodhist> element is comparable to ISAD(G) data element 3.2.3 and MARC field 561.

Example

```
<custodhist xmlns="urn:isbn:1-931666-22-9">
 <p>The George Franklin Papers were maintained by the staff of
   the Mayor's Office, City of Irvine, California, in the
   records storage facility at City Hall from the time of
   Franklin's death in 1972 until they were transferred, at his
   family's request, to Special Collections and Archives, The
   UC Irvine Libraries, in 1988.</p>
</custodhist>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element custodhist
{
   att.EADGlobal.attributes,
   head?,
   ( model.blocks | custodhist | acqinfo )+
}
```

<dao>

<dao> (Digital Archival Object) A linking element that uses the attributes ENTITYREF or HREF to connect the finding aid information to electronic representations of the described materials. The <dao> and <daogrp> elements allow the content of an archival collection or record group to be incorporated in the finding aid. These digital representations include graphic images, audio or video clips, images of text pages, and electronic transcriptions of text. The objects can be selected examples, or digital surrogates all the materials in an archival fonds or series.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.desc.full model.did

Contained by EAD: archdesc archdescgrp archref bioghist c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 did odd scopecontent

May contain EAD: daodesc

Note Use the Extended Pointer <extptr/> element to link the finding aid to electronic objects that are not part of the described materials.Use the ACTUATE attribute to designate whether the object is displayed automatically ("onload") or only if the user requests it ("onrequest"). Use the SHOW attribute to define whether a remote resource appears at the point of the link, in a new window, or replaces

the link.
See also related elements <daodesc>, <daogrp>, and <daoloc>.
While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle>Photographs</unittitle>
  <unitdate type="inclusive"
   normal="1895/1928">1895-1928</unitdate>
 </did>
 <c03 level="item">
  <did>
   <unittitle>John Smith graduation portrait</unittitle>
   <unitdate type="single"
    normal="18950528">May 28,
      1895</unitdate>
   <dao linktype="simple"
    href="http://imgs.ud.edu/archives/image/f12001_1.jpg" actuate="onrequest" s
how="new"/>
  </did>
 </c03>
 <c03 level="item">
  <did>
   <unittitle>Photographs of John Smith and family
      members</unittitle>
   <unitdate type="inclusive"
    normal="1907-1928">1907-1928</unitdate>
   <physdesc>
    <extent>12 photographic
       prints</extent>
   </physdesc>
  </did>
 </c03>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration element dao { att.EADGlobal.attributes, att.xlink.attributes, daodesc? }

<daodesc>

<daodesc> (Digital Archival Object Description) Information about the contents, usage, or source of a Digital Archival Object <dao> or Digital Archival Object Group <daogrp>. When the <unittitle> or other descriptive information in a Component <c> is sufficient to identify one or more digital objects, the <daodesc> caption is not necessary.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by	EAD: dao daogrp daoloc
May contain	EAD: address blockquote chronlist head list note p table
Note	See also related elements <dao>, <daogrp>, and <daoloc>.
Example	<c02 xmlns="urn:isbn:1-931666-22-9" level="file"> <did> <unittitle>Photographs of John Smith and family members</unittitle> <unitdate type="inclusive" normal="1895/1928">1895-1928</unitdate> <daogrp linktype="extended"> <daodesc> Sample digitized image from this file: John Smith graduation portrait, <date normal="18950528">28 May 1895</date>. </daodesc> <resource linktype="resource" label="start"/> <daoloc entityref="f0042_1tmb" linktype="locator" label="thumb"/> <daoloc entityref="f0042_1ref" linktype="locator" label="reference"/> <arc linktype="arc" show="embed" actuate="onload" from="start" to="thumb"/> <arc linktype="arc" show="new" actuate="onrequest" from="thumb" to="reference"/> </daogrp> </did> </c02>
Content model	<content> </content>
Schema Declaration	element daodesc { att.EADGlobal.attributes, head?, model.blocks+ }

<daogrp>

<daogrp> (Digital Archival Object Group) A wrapper element that contains two or more related Digital Archival Object Locations <daoloc> that should be thought of as a group and may share a single common Digital Archival Object Description <daodesc>. They may also form an extended link group to enable a set of multidirectional links. The <dao>, <daogrp>, and <daoloc> elements allow the content of the described materials to be incorporated in the finding aid.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)
Member of	model.desc.full model.did
Contained by	EAD: archdesc archdescgrp archref bioghist c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 did odd scopecontent
May contain	EAD: arc daodesc daoloc extptrloc extrefloc ptrloc refloc resource
Note	See also related elements <dao>, <daodesc>, <daoloc> and <linkgrp>.While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking

elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle>Photographs of John Smith and family
    members</unittitle>
  <unitdate type="inclusive"
   normal="1895/1928">1895-1928</unitdate>
  <daogrp linktype="extended">
   <daodesc>
    <p>Sample digitized image from this file: John Smith
        graduation portrait, <date normal="18950528">28
          May 1895</date>.</p>
   </daodesc>
   <resource linktype="resource"
    label="start"/>
   <daoloc entityref="f0042_1tmb"
    linktype="locator" label="thumb"/>
   <daoloc entityref="f0042_1ref"
    linktype="locator" label="reference"/>
   <arc linktype="arc" show="embed"
    actuate="onload" from="start" to="thumb"/>
   <arc linktype="arc" show="new"
    actuate="onrequest" from="thumb" to="reference"/>
  </daogrp>
 </did>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element daogrp
{
   att.EADGlobal.attributes,
   att.xlink.attributes,
   daodesc?,
   ( daoloc | model.extended.els )+
}
```

<daoloc>

<daoloc> (Digital Archival Object Location) The location of a Digital Archival Object <dao> that is a resource in an extended link. Within a Digital Archival Object Group <daogrp>, a <daoloc> element is used instead of a <dao> element to indicate that an extended, possibly multidirectional link is being tagged. See also related elements <dao>, <daogrp>, and <daodesc>.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Contained by	EAD: daogrp
May contain	EAD: daodesc
Note	While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.
Example	<c02 xmlns="urn:isbn:1-931666-22-9" level="file"> <did> <unittitle>Photographs of John Smith and family members</unittitle> <unitdate type="inclusive" normal="1895/1928">1895-1928</unitdate> <daogrp linktype="extended"> <daodesc> Sample digitized image from this file: John Smith graduation portrait, <date normal="18950528">28 May 1895</date>. </daodesc> <resource linktype="resource" label="start"/> <daoloc entityref="f0042_1tmb" linktype="locator" label="thumb"/> <daoloc entityref="f0042_1ref" linktype="locator" label="reference"/> <arc linktype="arc" show="embed" actuate="onload" from="start" to="thumb"/> <arc linktype="arc" show="new" actuate="onrequest" from="thumb" to="reference"/> </daogrp> </did> </c02>
Content model	<content> </content>
Schema Declaration	element daoloc { att.EADGlobal.attributes, att.xlink.attributes, daodesc? }

<date>

<date> (Date) A generic element that contains a month, day, or year in any format. Use <date> to identify any dates that merit encoding, except for the creation and other relevant dates of the described materials, which are instead tagged with the <unitdate> element. Examples of dates that might merit encoding are a person's birth date, the date the materials were acquired, or the date of an event in a chronology. These dates may be entered in the form of text or numbers, and may consist of a single date or range of dates.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.normalized (*@normal*) att.calendar (*@calendar*) att.era (*@era*) att.certainty (*@certainty*)
Member of	model.data

Contained by	EAD: change chronitem creation entry event extrefloc imprint item label legalstatus p physdesc physfacet publicationstmt ref refloc subtitle title titlepage titleproper unittitle
May contain	EAD: emph extptr lb ptr
Note	A standard numeric form of the date (YYYYMMDD, etc.) can be specified with the NORMAL attribute to facilitate machine comparison of dates for searching, for example, 19480101/19980401 (YYYYMMDD/YYYYMMDD), or 1948/1998 (YYYY/YYYY). The TYPE attribute can be used to supply a more specific designation, for example, "life," "flourish," "depiction," "publication," or "acquisition." The CERTAINTY attribute may be used to indicate the degree of precision in the dating, for example, "circa," "approximately," or "after." The CALENDAR attribute, which has a default value of "gregorian," specifies the calendar from which the date stems. The value "ce" (common or Christian era) is the default for the ERA attribute.
Example	<bibref xmlns="urn:isbn:1-931666-22-9"> <persname role="author">Kinder, Dolores.</persname> <title render="italic">Once Upon a Lullaby.</title> <imprint> <geogname>New York: </geogname> <publisher>Wells & Sons, </publisher> <date type="publication">1931</date> </imprint> </bibref>
Example	<acqinfo xmlns="urn:isbn:1-931666-22-9"> This collection, number <num type="donor">1988-015,</num> was donated by Mrs. Dolores Franklin on <date type="acquisition" normal="19880423">April 23, 1988.</date> </acqinfo>
Schematron	All the <date> elements MUST have a *normal* attribute whose pattern respects the ISO8601 standard and take the following form: YYYY-MM-DD <s:rule context="ead:date"> <s:assert role="MUST" test="matches(@normal, '^(([0-9]|[1-9][0-9]|[1-9][0-9]{2}|[1-9][0-9]{3}))-(0[1-9]|1[012])-(0[1-9]|[12][0-9]|3[01])$')">@normal attribute MUST respect ISO8601 pattern = YYYY-MM-DD</s:assert> </s:rule>
Content model	<content/>

Schema Declaration	element date
	{
	att.EADGlobal.attributes,
	att.typed.attributes,
	att.normalized.attributes,
	att.calendar.attributes,
	att.era.attributes,
	att.certainty.attributes,
	(text | model.phrase.bare)*
	}

<defitem>

<defitem> (Definition List Item) A formatting element in a special type of list that keeps an entry in a list (called a <label>) paired with its definition, description, or explanation (called an <item>). The <defitem> can be thought of as an entry with two cells: <label> followed by <item>. Lists with <defitem>s are often displayed in two columns.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: list
May contain	EAD: item label
Note	See also related element <list>.
Example	<list xmlns="urn:isbn:1-931666-22-9" type="deflist"> <listhead> <head01>Abbreviation</head01> <head02>Expansion</head02> </listhead> <defitem> <label>ALS</label> <item>Autograph Letter Signed</item> </defitem> <defitem> <label>TLS</label> <item>Typewritten Letter Signed</item> </defitem> </list>
Content model	<content> </content>
Schema Declaration	element defitem { att.EADGlobal.attributes, label, item }

<descgrp>

<descgrp> (Description Group) An element that can be used to bring together any group of elements that are children of the Archival Description <archdesc> element except for the <did> and <dsc> elements. Description Group might be used, for example, to cluster elements into groups that correspond to the areas specified by the General International Standard Archival Description (ISAD(G)).

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp
May contain	EAD: accessrestrict accruals acqinfo address altformavail appraisal arrangement bibliography bioghist blockquote chronlist controlaccess custodhist descgrp fileplan head list note odd originalsloc otherfindaid p phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial table userestrict
Note	Description Group can be used in place of wrapper elements from EAD Version 1.0 such as Administrative Information <admininfo> and Adjunct Descriptive Data <add>.Use the TYPE attribute to characterize the nature of the groupings.

Example

```
<descgrp xmlns="urn:isbn:1-931666-22-9">
 <head>Related and Associated Materials</head>
 <separatedmaterial>
  <p>Photographs and sound recordings have been transferred to
     the appropriate custodial divisions of the Library where
     they are identified as part of these papers. Among the
     sound recordings are the following broadcasts:</p>
  <list>[...]</list>
 </separatedmaterial>
 <separatedmaterial>
  <p>Other papers of Earl Warren, which relate chiefly to his
     early years and public service in California, are held
     by the California State Archives in Sacramento.</p>
 </separatedmaterial>
 <relatedmaterial>
  <p>Records relating to the Warren Commission are held in the
     National Archives and Records Administration.</p>
 </relatedmaterial>
</descgrp>
```

Example

```
<descgrp xmlns="urn:isbn:1-931666-22-9">
 <head>Important Information for Users of the Collection</head>
 <accessrestrict>
  <head>Access</head>
  <p>Collection is open for research. Scrapbooks are extremely
     fragile and require close supervision by Special
     Collections staff during use.</p>
 </accessrestrict>
 <userestrict>
  <head>Publication Rights</head>
  <p>Property rights reside with the University of California.
     Literary rights are retained by the creators of the
     records and their heirs. For permissions to reproduce or
     to publish, please contact the Head of Special
     Collections and Archives.</p>
 </userestrict>
 <prefercite>
  <head>Preferred Citation</head>
  <p>Eugene Loring Papers. MS-P02. Special Collections and
     Archives, The UCI Libraries, Irvine, California.</p>
 </prefercite>
 <acqinfo>
  <head>Acquisition Information</head>
  <p>Gift of Eugene Loring, 1975 and 1980.</p>
 </acqinfo>
 <processinfo>
  <head>Processing History</head>
  <p>Preliminary processing by Roger Berry in 1975 and 1980.
     Processing completed by Emma Kheradyar in 1996-1997.
     Guide edited by Laura Clark Brown in 1998 and completed
     by William Landis in 2000.</p>
 </processinfo>
</descgrp>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element descgrp
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   head?,
   ( model.blocks | model.desc.base )+
}
```

<descrules>

<descrules> (Descriptive Rules) A subelement of Profile Description <profiledesc> for the enumeration of the rules, standards, conventions, and protocols used in preparing the description.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: profiledesc

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp ptr ref subtitle title

Note Do not confuse this element with the RULES attribute in the <controlaccess> subelements, e.g., <persname>, <geogname>, and <title>, which are used to specify the descriptive rules, such as AACR2R, used in formulating individual access points.The <descrules> element is comparable to ISAD(G) data element 3.7.2.

Example

```
<descrules xmlns="urn:isbn:1-931666-22-9">Finding aid prepared using
<title render="italic">Rules for Archival
   Description</title>
</descrules>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element descrules { att.EADGlobal.attributes, ( text | model.phrase.basic )* }
```

<did>

<did> (Descriptive Identification) A required wrapper element that bundles other elements identifying core information about the described materials in either Archival Description <archdesc> or a Component <c>. The various <did> subelements are intended for brief, clearly designated statements of information and, except for <note>, do not require Paragraphs <p> to enter text.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12

May contain EAD: abstract container dao daogrp head langmaterial materialspec note origination physdesc physloc repository unitdate unitid unittitle

Note The <did> groups elements that constitute a good basic description of an archival unit. This grouping ensures that the same data elements and structure are available at every level of description within the EAD hierarchy. It facilitates

the retrieval or other output of a cohesive body of elements for resource discovery and recognition.The <did> in <archdesc> is sometimes called the high level <did>, because it describes the collection as a whole. Consider using the following elements for this high level <did>: <head>, <origination>, <unittitle>, <physdesc>, <repository>, and <abstract>. The <unitid> and <physloc> elements are suggested if applicable to a repository's practice. A <did> within a Component <c> can be less complete, and might have only a <container> or <unitid> and a <unittitle>.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" type="inventory" level="subgrp">
 <did>
  <head>Overview of the Records</head>
  <repository label="Repository:">
   <corpname>Minnesota Historical Society</corpname>
  </repository>
  <origination label="Creator:">Minnesota. Game and Fish
    Department</origination>
  <unittitle label="Title:">Game laws violation records, </unittitle>
  <unitdate label="Dates:">1908-1928</unitdate>
  <abstract label="Abstract:">Records of prosecutions for and
    seizures of property resulting from violation of the
    state's hunting and fishing laws.</abstract>
  <physdesc label="Quantity:">2.25 cu. ft. (7 v. and 1 folder
    in 3 boxes)</physdesc>
  <physloc label="Location:">See Detailed Description section
    for box location</physloc>
 </did> . . . </archdesc>
```

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>
  <unittitle>Early Durham Cartularies</unittitle>
  <unitid>GB-0033-DCD</unitid>
  <unitdate label="Date range:"
   normal="1220/1230">compiled
    between 1220 and 1230, with later additions</unitdate>
  <physdesc label="Extent:">1 cartulary (175ff. and inserts),
    1 fragment and 1 [photostat of] fragment.</physdesc>
  <repository label="Repository:">Durham University Library,
    Archives and Special Collections</repository>
  <origination label="Origination:">early cartularies produced
    by the Durham monastic administration. </origination>
 </did>
</archdesc>
```

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="combined">
 <c01 level="series">
  <did>
   <unittitle>Series 1: Correspondence,</unittitle>
   <unitdate type="inclusive">1943-1978</unitdate>
   <physdesc>
    <extent>2.5 linear ft. </extent>(5 document
      boxes)</physdesc>
  </did>
  <scopecontent>[...]</scopecontent>
  <c02 level="subseries">
```

```
<did>
 <unittitle>Subseries 1.1: Outgoing Correspondence, </unittitle>
 <unitdate type="inclusive">1943-1969</unitdate>
 <physdesc>
  <extent>0.75 linear
       ft.</extent>
 </physdesc>
</did>
<c03 level="file">
 <did>
  <physloc audience="internal">B:14:D</physloc>
  <container type="box">1</container>
  <container type="folder">1</container>
  <unittitle>Abbinger-Aldrich</unittitle>
  <physdesc>
   <extent>14 letters</extent>
  </physdesc>
 </did>
</c03>
</c02>
</c01>
</dsc>
```

Schematron <did> elements MUST contain <unitid>
<s:rule context="ead:did"> <s:assert role="MUST" test="ead:unitid">a did MUST have a unitid, according 17.3 and WP19</s:assert> </s:rule>

Schematron <did> elements MUST contain <unittittle>
<s:rule context="ead:did"> <s:assert role="MUST" test="ead:unittittle">a did MUST have a unittittle, according 17.3</s:assert> </s:rule>

Schematron a <did> MUST have at least one non-empty <unittittle>
<s:rule context="ead:did"> <s:assert role="MUST" test="count(ead:unittittle[text()]) > 0">a did MUST have at least one non-empty unittittle</s:assert> </s:rule>

Content model

<content/>

Schema Declaration element did { att.EADGlobal.attributes, (head?, model.did+) }

<dimensions>

<dimensions> (Dimensions) A subelement of <physdesc> for information about the size of the materials being described; usually includes numerical data. Measurements may be expressed in any convenient unit. Attributes may be used when the unit of measurement or type of dimension is not clear in the finding aid text. The UNIT attribute specifies the kind of measurement, for example, "inches" or "meters." The TYPE attribute specifies the kind of dimensions being measured, for example, "height" or "circumference." Multiple dimensions, for example, height-by-width, can be tagged in a single <dimensions> element or in separate <dimensions> with distinctive attribute values.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*) att.typed (*@type*)

unit **Status** Optional

Datatype

Contained by	EAD: dimensions physdesc
May contain	EAD: abbr archref bibref dimensions emph expan extptr extref lb linkgrp ptr ref subtitle title
Note	Do not confuse with the <extent> element, which is used to tag the quantity of described materials.
Example	<dsc xmlns="urn:isbn:1-931666-22-9" type="in-depth"> <head>Handlist</head> <c01> <did> <unittitle>Cartuarium vetus</unittitle> <physdesc>3 paper leaves; 1 parchment on paper leaf; 175 leaves, 4 inserts, 2 schedules, parchment; 4 paper leaves <dimensions> approximately 230 mm x 163 mm.</dimensions> </physdesc> </did> </c01> . . . </dsc>
Content model	<content> </content>

Schema Declaration	element dimensions
	{
	att.EADGlobal.attributes,
	att.labeled.attributes,
	att.typed.attributes,
	attribute unit { text }?,
	(text, model.phrase.basic, dimensions)*
	}

** ** (Text Division) A generic element that designates a major section of text within <frontmatter>. Examples of these text divisions include a title page, preface, acknowledgments, or instructions for using a finding aid. Use the <head> element to identify the 's purpose.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: div frontmatter
May contain	EAD: address blockquote chronlist div head list note p table
Example	<frontmatter xmlns="urn:isbn:1-931666-22-9"> <titlepage>[...]</titlepage> <head>Acknowledgements</head> The University of California, Irvine Libraries wishes to acknowledge the generosity of the family of Edgar Holden for an endowment in support of the processing and maintenance of this collection and the University of California Office of the President for grant funding in support of the encoding of this and other finding aids using the Encoded Archival Description standard.

 . . . </frontmatter>

Example

```
<frontmatter xmlns="urn:isbn:1-931666-22-9">
 <titlepage>
  <titleproper>Inventory of the Rietta Hines Herbert Papers,
     1940-1969</titleproper>
  <author>Processed by: Debra Carter</author>
  <publisher>Schomburg Center for Research in Black
     Culture<lb/> The New York Public Library</publisher>
  <date>August, 1977</date>

<!--&amp;amp;schtp;-->
  <p> © <date>1999 </date> The New York Public Library, Astor,
     Lenox and Tilden Foundations. All rights reserved.</p>
 </titlepage>
 <div>
  <head>Preface</head>
  <p>This inventory is one of several prepared as a part of
     the archival preservation program at the Schomburg
     Center for Research in Black Culture, a research
     division of The New York Public Library.</p>
  <p>The Schomburg archival preservation program involves the
     organization and preservation of primary source material
     held by the Center and of significance to the study of
     the Black Experience. It furthermore includes the
     preparation of detailed inventories of these records,
     making the information contained therein accessible as
     well as available to scholars.</p>
  <p>The necessary staff and supplies for this program were
     made available through a combination of Library,
     National Endowment for the Humanities grant, and State
     of New York grant funds.</p>
 </div>
</frontmatter>
```

Content model

```
<content>
</content>
```

Schema Declaration

element div { att.EADGlobal.attributes, head?, model.blocks*, div* }

<dsc>

<dsc> (Description of Subordinate Components) A wrapper element that bundles information about the hierarchical groupings of the materials being described. The subordinate components can be presented in several different forms or levels of descriptive detail, which are identified by the element's required TYPE attribute. For example, "analyticover" identifies an overview description of series and subseries, which might be followed by a second <dsc> with the TYPE attribute set to "in-depth" that provides a more detailed listing of the content of the materials, including information about the container numbers associated with those materials. The TYPE attribute value "combined" is used when the description of a series is followed immediately by a listing of the contents of that series. The TYPE attribute "othertype" is for models that do not follow any of the above-mentioned formats, in which case the OTHERTYPE attribute can then be used to

specify a particular presentation model.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
att.dsctab.tpattern (*@tpattern*)

type — characterizes the element in some sense, using any convenient classification scheme or typology.
Derived from att.typed
Status Optional
Datatype

Member of model.desc.full

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 dsc

May contain EAD: address blockquote c c01 chronlist dsc head list note p table thead

Note See also related elements <c> and <c01> through <c12>.

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="combined">
 <c01 level="series">
  <did>
   <unittitle>Activities, </unittitle>
   <unitdate type="inclusive">1965-1971</unitdate>
   <physdesc>
    <extent>0.3 linear ft.</extent>
   </physdesc>
  </did>
  <scopecontent>
   <p>The Activities series gives examples of the types of
      activities offered at the camp. The folders contain
   <genreform>reports,</genreform>
    <genreform>schedules,</genreform> and
   <genreform>inventories </genreform> from each
      activity area of the camp. These records are
      predominantly from the late 1960s and early 1970s
      and replicate some of the information found in the
      staff manuals.</p>
  </scopecontent>
  <c02 level="file">
   <did>
    <container label="Box" type="box">1</container>
    <unittitle>General, </unittitle>
    <unitdate type="inclusive">1970-1971</unitdate>
   </did>
  </c02>
  <c02 level="file">
   <did>
    <container type="box">1</container>
    <unittitle>Camp Crafts, </unittitle>
    <unitdate>1967</unitdate>
   </did>
  </c02>
  <c02 level="file">
   <did>
    <container type="box">1</container>
```

```
  <unittitle>Education Program, </unittitle>
  <unitdate>1967</unitdate>
 </did>
</c02>
<c02 level="file">
 <did>
  <container type="box">1</container>
  <unittitle>Expressive Arts, </unittitle>
  <unitdate>1970</unitdate>
 </did>
</c02> . . . </c01> . . . </dsc>
```

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="analyticover">
 <c01 level="series">
  <did>
   <unitid>1-429-1</unitid>
   <unittitle>Forest Stand Maps by Township and Basemap </unittitle>
   <unitdate type="inclusive">1958-1979</unitdate>
   <physdesc>
    <extent>36 ft. (approx. 1700 sheets)</extent>
      of <genreform>cartographic records.</genreform>
   </physdesc>
   <materialspec>Scale: predominantly 4 inches to 1 mile
      (1:15,840)</materialspec>
  </did>
  <scopecontent>
   <p>Series consists of forest stand maps. A map
      sheet was created for each township of the surveyed
      section of the province and for each basemap area in
      unsurveyed areas.</p> . . . </scopecontent>
 </c01>
 <c01 level="series">
  <did>
   <unitid>RG 1-429-2</unitid>
   <unittitle>Forest Stand Map Composites</unittitle>
   <unitdate type="inclusive">1958-1971</unitdate>
   <physdesc>
    <extent>ca.70</extent>
    <genreform>maps
    </genreform>
   </physdesc>
   <materialspec>Scale: 1 inch to 1 mile</materialspec>
  </did>
  <scopecontent>
   <p>Series consists of composite maps of the forest
      resource inventory data from all the townships
      within a Forestry Management Unit. The
      composites offer a broader view of an area than the
      township/basemaps, however the forest stand
      statistics are quite small and difficult to
      read.</p> . . . </scopecontent>
 </c01> . . . </dsc>
```

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="in-depth">
```

```
<c01 level="series">
 <did>
  <unittitle>Series 1: Administrative Records, </unittitle>
  <unitdate type="inclusive">1912-1956.</unitdate>
 </did>
 <c02>
  <did>
   <container id="mss92-894c-bx1"
    type="box">Box
        1</container>
   <container parent="mss92-894c-bx1"
    label="Folder" type="folder">7-8 </container>
   <unittitle>Annual reports, </unittitle>
   <unitdate type="inclusive">1912-16, 1922</unitdate>
  </did>
 </c02>
 <c02>
  <did>
   <container parent="mss92-894c-bx1"
    label="Folder" type="folder">9 </container>
   <unittitle>Board of Directors–Minutes and
        correspondence, </unittitle>
   <unitdate type="inclusive">1947-1949</unitdate>
  </did>
 </c02>
 <c02>
  <did>
   <container parent="mss92-894c-bx1"
    label="Folder" type="folder">10 </container>
   <unittitle>Contracts and specifications for
        construction of nurses' quarters, </unittitle>
   <unitdate>ca. 1947</unitdate>
  </did>
 </c02>
 <c02>
  <did>
   <container parent="mss92-894c-bx1"
    label="Folder" type="folder">11 </container>
   <unittitle>Marin County Reports, </unittitle>
   <unitdate type="inclusive">1955-1956</unitdate>
  </did>
 </c02>
</c01>
<c01 level="series">
 <did>
  <unittitle>Series 3: Philip King Brown, </unittitle>
  <unitdate type="inclusive">1910-1931, n.d.</unitdate>
 </did>
 <c02>
  <did>
   <container parent="mss92-894c-bx1"
    label="Folder" type="folder">21 </container>
```

```
    <unittitle>Correspondence, </unittitle>
    <unitdate type="inclusive">1910-1931</unitdate>
   </did>
  </c02>
  <c02>
   <did>
    <container parent="mss92-894c-bx1"
     label="Folder" type="folder">22 </container>
    <unittitle>Writings, </unittitle>
    <unitdate>n.d.</unitdate>
   </did>
  </c02> . . . </c01>
</dsc>
```

Schematron <dsc> MUST have a *type* attribute
<s:rule context="ead:dsc"> <s:assert role="MUST" test="@type">dsc MUST have a type attribute</s:assert> </s:rule>

Schematron if <dsc>'s *type* attribute has "othertype" for value, <dsc> MUST have a not empty *othertype* attribute
<s:rule context="ead:dsc"> <s:assert role="MUST" test="not(@type ='othertype') or (@othertype and not(@othertype=''))">if dsc's type attribute has "othertype" for value, dsc MUST have a not empty othertype attribute</s:assert> </s:rule>

Schematron the <dsc> components SHOULD numbered, from <c01> to <c06>
<s:rule role="SHOULD" context="ead:dsc | ead:c01 | ead:c02 | ead:c03 | ead:c04 | ead:c05 "> <s:assert test="not(ead:c)">the dsc components SHOULD numbered, from c01 to c06</s:assert> </s:rule>

Content model

```
<content/>
```

Schema Declaration

```
element dsc
{
   att.EADGlobal.attributes,
   att.dsctab.tpattern.attributes,
   attribute type { data.enumerated }?,
   ( head?, model.blocks* ),
   ( ( thead?, ( ( c, thead? )+ | ( c01, thead? )+ ) ) | dsc* )
}
```

<dscgroup>

<dscgroup> (Description of Subordinate Components Group) A wrapper element used only within the <archdescgrp> subelement of <eadgrp> in the EAD Group Document Type Definition. The <dscgrp> contains two or more <ead> encoded finding aids, one after the other.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by —
May contain EAD: address blockquote chronlist ead head list note p table
Note See also the <eadgrp> element.
Content model

```
<content>
</content>
```

Schema Declaration element dscgroup { att.EADGlobal.attributes, head?, ead, model.blocks* }

<ead>

<ead> (Encoded Archival Description) The outermost wrapper element for an information access tool known generically as a finding aid. A finding aid establishes physical and intellectual control over many types of archival materials and helps researchers understand and access the materials being described. The <ead> element defines a particular instance of a document encoded with the EAD Document Type Definition.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
att.relatedencoding (*@relatedencoding*)

Contained by EAD: dscgroup

May contain EAD: archdesc eadheader frontmatter

Note The AUDIENCE attribute value may be set to "external" to display data in all subelements, unless the value is changed for a specific element. A separate Document Type Definition called EAD Group can be used to bundle <ead> finding aids that describe different parts of a collection that have been dispersed among various institutions or custodial units. See the <eadgrp> element description for additional information.

Example The following elements constitute the minimum set of elements for an EAD instance (i.e., those required by the DTD). Although the Description of Subordinate Components <dsc> is not itself required, if it is used its type attribute must be set.

```
<ead xmlns="urn:isbn:1-931666-22-9">
 <eadheader>
  <eadid>[...]</eadid>
  <filedesc>
   <titlestmt>
    <titleproper>[...]</titleproper>
   </titlestmt>
  </filedesc>
 </eadheader>
 <archdesc level="fonds">
  <did>[...]</did>
  <dsc type="combined">[...]</dsc>
 </archdesc>
</ead>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element ead
{
   att.EADGlobal.attributes,
   att.relatedencoding.attributes,
   ( eadheader, frontmatter?, archdesc )
}
```

<eadheader>

<eadheader> (EAD Header) A wrapper element for bibliographic and descriptive information about the finding aid document rather than the archival materials being described. The <eadheader> is modeled on the Text Encoding Initiative (TEI) header element to encourage uniformity in the provision of metadata across document types.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.encodings (*@countryencoding*, *@langencoding*, *@scriptencoding*, *@repositoryencoding*, *@dateencoding*) att.relatedencoding (*@relatedencoding*)

findaidstatus — The extent to which the encoded finding aid is a finished document.
Status Optional
Datatype

Contained by EAD: ead

May contain EAD: eadid filedesc profiledesc revisiondesc

Note The <eadheader> is required, because information that was often unrecorded for a local paper finding aid is essential in a machine-readable environment. Four subelements are available, which must occur in the following order: <eadid> (required), <filedesc> (required), <profiledesc> (optional), and <revisiondesc> (optional). These elements and their subelements provide: a unique identification code for the finding aid; bibliographic information, such as the author and title of the finding aid; information about the encoding of the finding aid; and statements about significant revisions.The FINDAIDSTATUS attribute can be used to indicate how complete or polished the information in the finding aid is. The COUNTRYENCODING, DATEENCODING, LANGENCODING, REPOSITORYENCODING, and SCRIPTENCODING attributes are used to specify the ISO standards from which code values for other attributes, such as COUNTRYCODE in <eadid> and <unitid>, are taken.
Some or all of the <eadheader> subelements can be used to display title page information. Alternatively, the <eadheader> can be blocked from display by setting the AUDIENCE attribute to "internal" and using the <frontmatter> <titlepage> elements to create a title page.

Example Following are the required <eadheader> elements.

```
<eadheader xmlns="urn:isbn:1-931666-22-9">
 <eadid>[...]</eadid>
 <filedesc>
  <titlestmt>
   <titleproper>[...]</titleproper>
  </titlestmt>
 </filedesc>
</eadheader>
```

Schematron If the language of the description is not English, a parallel form of the title in English SHOULD be added. For instance, using another <unittitle> element with a *type* attribute

```
<s:rule context="ead:eadheader"> <s:assert role="SHOULD"
 test="ead:profiledesc/ead:langusage/@langcode = 'eng'">If the language of the
description is not English, a parallel form of the title in English SHOULD be
added. For instance, using another unittitle element with a type
attribute</s:assert> </s:rule>
```

Schematron <eadheader> MUST contain a <profiledesc>element

```
<s:rule context="ead:eadheader">
```

<s:assert role="MUST" test="ead:profiledesc">eadheader MUST contain a profiledesc element</s:assert> </s:rule>

Schematron A date of creation for the finding aid is welcome. The relevant element in <date>, child of <creation>
<s:rule context="ead:eadheader"> <s:assert role="COULD" test="ead:creation/ead:date and normalize-space(ead:creation/ead:date)">eadheader COULD have a non-empty creation-date</s:assert> </s:rule>

Content model

<content/>

Schema Declaration

element eadheader
{
att.EADGlobal.attributes,
att.encodings.attributes,
att.relatedencoding.attributes,
attribute findaidstatus { text }?,
(eadid, filedesc, profiledesc?, revisiondesc?)
}

<eadid>

<eadid> (EAD Identifier) A required subelement of <eadheader> that designates a unique code for a particular EAD finding aid document.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.coded (*@countrycode*)

mainagencycode	A code compliant with ISO/DIS 15511 Information and Documentation International Standard Identifier for Libraries and Related Organizations (ISIL).	
	Status	Optional
	Datatype	
	Note	Values should be supplied without the country code, which should be placed instead in the COUNTRYCODE attribute.
url	An absolute (http://www.loc.gov/ead/ms99999.xml) or relative (ms99999.xml) Uniform Resource Locator.	
	Status	Optional
	Datatype	
urn	A Uniform Resource Name intended to serve as a persistent, location-independent, resource identifier.	
	Status	Optional
	Datatype	
publicid	A formal public identifier (FPI) that includes the owner name and an object name.	
	Status	Optional
	Datatype	
	Note	Defined in ISO/IEC 9070:1991, the FPI is intended to be universally unique, with each owner name being unique, and each object name unique within the name

			domain controlled by the owner.
	identifier	A machine-readable unique identifier.	
		Status	Optional
		Datatype	
Contained by	EAD: eadheader		
May contain	Character data only		
Note	Two of the attributes, COUNTRYCODE and MAINAGENCYCODE, are required to make the <eadid> compliant with ISAD(G) element 3.1.1. MAINAGENCYCODE provides the ISO 15511 code for the institution that maintains the finding aid (which may not be the same as the institution that is the custodian of the materials described). COUNTRYCODE supplies the ISO 3166-1 code for the country of the maintenance agency. In addition to these two attributes, it is recommended that repositories also use at least one of the following attributes: URL, PUBLICID, or IDENTIFIER to make the <eadid> globally unique. PUBLICID should be a Formal Public Identifier, URL an absolute or relative address, and IDENTIFIER a machine-readable unique identifier for the finding aid file. (The proper syntax for PUBLICID is defined in ISO/IEC 9070:1991 Information technology -- SGML support facilities -- Registration procedures for public text owner identifiers.)		
Example	<eadid xmlns="urn:isbn:1-931666-22-9" countrycode="us" mainagencycode="txu-hu" publicid="-//us::txu-hu//TEXT us::txu-hu::hrc.00001//EN" url="www.lib.utexas.edu/taro/hrc/00001.xml">hrc.00001</eadid>		
Schematron	the <eadid> element MUST contain text. Most of the time, it is automatically generated by the archival tool. <s:rule context="ead:eadid"> <s:assert role="MUST" test="normalize-space(.)">eadid MUST contain text</s:assert> </s:rule>		
Schematron	<eadid> SHOULD contain a *mainagencycode* attribute, which provides (if applicable) the ISO 15511 code for the institution that maintains the finding aid. <s:rule context="ead:eadid"> <s:assert role="SHOULD" test="@mainagencycode"> eadid SHOULD contain a mainagencycode attribute </s:assert> </s:rule>		
Content model			
	<content/>		

Schema Declaration	element eadid
	{
	att.EADGlobal.attributes,
	att.coded.attributes,
	attribute mainagencycode { text }?,
	attribute url { text }?,
	attribute urn { text }?,
	attribute publicid { text }?,
	attribute identifier { text }?,
	text
	}		

<edition>

<edition> (Edition) A version of the finding aid or other bibliographic entity. When used in the <editionstmt> subelement of the <eadheader> or in the <titlepage> subelement of <frontmatter>,

the <edition> refers to the version of the finding aid. A new edition of a finding aid represents substantial additions or changes and should supersede previous online versions. When used in a Bibliographic Reference <bibref>, the <edition> element specifies the version of a published work.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: bibref editionstmt titlepage unittitle
May contain EAD: emph extptr lb ptr
Example

```
<eadheader xmlns="urn:isbn:1-931666-22-9" audience="internal"
 langencoding="iso639-2b">
 <eadid>[...]</eadid>
 <filedesc>
  <titlestmt>[...]</titlestmt>
  <editionstmt>
   <edition>2nd ed.</edition>
   <p>This edition reflects substantial additions to the
      collection in 1994.</p>
  </editionstmt>
 </filedesc> . . . </eadheader>
```

Content model

```
<content>
</content>
```

Schema Declaration element edition { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<editionstmt>

<editionstmt> (Edition Statement) An optional subelement within the <filedesc> portion of the <eadheader> element that groups information about a finding aid edition by providing an <edition> element as well as a Paragraph <p> element for narrative statements.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: filedesc
May contain EAD: edition p
Example

```
<eadheader xmlns="urn:isbn:1-931666-22-9" audience="internal"
 langencoding="iso639-2b">
 <eadid>[...]</eadid>
 <filedesc>
  <titlestmt>[...]</titlestmt>
  <editionstmt>
   <edition>2nd ed.</edition>
   <p>This edition reflects substantial additions to the
      collection in 1994.</p>
  </editionstmt>
 </filedesc> . . . </eadheader>
```

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper>Etat sommaire des fonds d'archives privées du
    Centre historique des Archives nationales</titleproper>
  <subtitle> Séries AP et AB XIX</subtitle>
  <author>Instrument de recherche rédigé par Claire Sibille,
    avec la collaboration de George-Andrée Banguio et de
```

```
    Violaine Le Nénaon, sous la direction de Christine
    Nougaret</author>
  </titlestmt>
  <editionstmt>
   <edition> Première édition</edition>
  </editionstmt>
  <publicationstmt>
   <publisher>Centre historique des Archives nationales de
    France (CHAN)</publisher>
   <address>
    <addressline>60 rue des Francs-Bourgeois</addressline>
    <addressline>F-75141 PARIS CEDEX 03</addressline>
   </address>
   <date>mai 2001</date>
  </publicationstmt>
 </filedesc>
```

Content model

```
<content>
</content>
```

Schema Declaration element editionstmt { att.EADGlobal.attributes, (edition | p)+ }

<emph>

<emph> (Emphasis) A formatting element for marking words or phrases that are stressed or emphasized for linguistic effect. Use the RENDER attribute to specify the kind of emphasis, e.g., bold or italics.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.rendered (*@render*)

Member of model.render

Contained by EAD: abstract addressline archref author bibref bibseries container corpname creation date descrules dimensions edition emph entry event extrefloc famname function genreform geogname head head01 head02 imprint item label langmaterial language langusage legalstatus materialspec name num occupation origination p persname physdesc physfacet physloc publisher ref refloc repository resource runner sponsor subarea subject subtitle title titleproper unitdate unitid unittitle

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp ptr ref subtitle title

Note When the content of an entire element should always be rendered in italics or some other display feature, use the style sheet functions instead of the <emph> element.

Example

```
<abstract xmlns="urn:isbn:1-931666-22-9" label="Abstract"> Papers
 document Donald C. Stone's work with Ornstein and Swencionis on
 the <emph render="italic">est</emph> Outcome Project, and the
 development of his doctoral research, including his various
 publications on the human potential movement, up to the
 completion of his doctoral dissertation. </abstract>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element emph
{
   att.EADGlobal.attributes,
   att.rendered.attributes,
   ( text | model.phrase.basic )*
}
```

<entry>

<entry> (Table Entry) A formatting element that designates the contents of a cell in a table. A cell is the intersection of a row and a column. The <entry> attributes control cell spanning, alignment of the contents, and the rules on the cell edges. The attributes can be specified for <entry> or inherited from the nearest of the following table elements: <table>, <tgroup>, <colspec/>, <tbody>, or <row>.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

align	**Status**	Optional
	Datatype	
	Legal values are:	**left**
		right
		center
		justify
		char
char	**Status**	Optional
	Datatype	
charoff	**Status**	Optional
	Datatype	
colname	**Status**	Optional
	Datatype	
colsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**
		O
morerows	**Status**	Optional
	Datatype	
nameend	**Status**	Optional
	Datatype	
namest	**Status**	Optional
	Datatype	
rowsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**

			O
	valign	**Status**	Optional
		Datatype	
		Legal values are:	**top**
			middle
			bottom

Contained by EAD: row

May contain EAD: abbr address archref bibref corpname date emph expan extptr extref famname function genreform geogname lb linkgrp list name note num occupation origination persname ptr ref repository subject subtitle title unitdate unittitle

Note Three attributes are used together to force horizontal alignment on a specific character, such as a decimal point. The ALIGN attribute must be set to "char" (align="char"). The CHAR attribute should be set to the specific character on which the text will align (for example the decimal point, char="."). The CHAROFF attribute controls the position of the alignment by naming the percentage of the current column width that is to the left of the alignment character (for example, charoff="30").The extent of a horizontal span is determined by naming the first column (NAMEST) and the last column (NAMEEND) in the span.
By convention, the specified rule is printed or displayed to the right of the column. External rules are specified using the FRAME attribute of the <table> element, horizontal rules are specified using ROWSEP.

Example

```
<table xmlns="urn:isbn:1-931666-22-9" frame="none">
 <tgroup cols="3">
  <colspec colnum="1" colname="1"
   align="left" colwidth="50pt"/>
  <colspec colnum="2" colname="2"
   align="left" colwidth="50pt"/>
  <colspec colnum="3" colname="3"
   align="left" colwidth="50pt"/>
  <thead>
   <row>
    <entry colname="1">Major Family Members</entry>
    <entry colname="2">Spouses</entry>
    <entry colname="3">Children</entry>
   </row>
  </thead>
  <tbody>
   <row>
    <entry colname="1">John Albemarle
        (1760-1806)</entry>
    <entry colname="2">Mary Frances Delaney
        (1769-1835)</entry>
    <entry colname="3">John Delaney Albemarle
        (1787-1848)</entry>
   </row> . . . </tbody>
 </tgroup>
</table>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element entry
{
   att.EADGlobal.attributes,
   attribute align { "left" | "right" | "center" | "justify" | "char" }?,
   attribute char { text }?,
   attribute charoff { text }?,
   attribute colname { text }?,
   attribute colsep { "1" | "O" }?,
   attribute morerows { text }?,
   attribute nameend { text }?,
   attribute namest { text }?,
   attribute rowsep { "1" | "O" }?,
   attribute valign { "top" | "middle" | "bottom" }?,
   ( text | ( model.phrase.plus | address | list | note ) )*
}
```

<event>

<event> (Event) That part of a Chronology List Item <chronitem> which describes or names something that happened. The <event> is paired with a <date> (a single date or date range) and can be grouped with other events in <eventgrp>, if multiple events need to be associated with the same <date>.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: chronitem eventgrp

May contain EAD: abbr address archref bibref blockquote chronlist corpname date emph expan extptr extref famname function genreform geogname lb linkgrp list name note num occupation origination persname ptr ref repository subject subtitle table title unitdate unittitle

Note See related element Chronology List <chronlist>.

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Biographical Note</head>
 <chronlist>
  <chronitem>
   <date>1892, May 7</date>
   <event>Born, <geogname>Glencoe, Ill.</geogname>
   </event>
  </chronitem>
  <chronitem>
   <date>1915</date>
   <event>A.B., <corpname>Yale University, </corpname>New
       Haven, Conn.</event>
  </chronitem>
  <chronitem>
   <date>1916</date>
   <event>Married <persname>Ada Hitchcock</persname>
   </event>
  </chronitem>
```

```
 <chronitem>
  <date>1917-1919</date>
  <event>Served in <corpname>United States
      Army</corpname>
  </event>
 </chronitem>
</chronlist>
</bioghist>
```

Content model

```
<content>
</content>
```

Schema Declaration element event { att.EADGlobal.attributes, (text | model.para.content)* }

<eventgrp>

<eventgrp> (Event Group) An element within a Chronology List Item <chronitem> that bundles multiple <event>s associated with the same <date>.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: chronitem
May contain EAD: event
Note See related element Chronology List <chronlist>.
Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Biographical Note</head>
 <chronlist>
  <chronitem>
   <date normal="19010718">1901 July 18</date>
   <event>Born, Holsterhausen, Westphalia, Germany </event>
  </chronitem>
  <chronitem>
   <date normal="1918">1918</date>
   <event>Member and active participant of Sokoly, Polish
     insurrection against the Germans</event>
  </chronitem>
  <chronitem>
   <date normal="1920">1920</date>
   <eventgrp>
    <event>Private, Polish Army, Polish-Russo
      War</event>
    <event>Graduated from Agricultural High School,
      People's University</event>
   </eventgrp>
  </chronitem> . . . </chronlist>
</bioghist>
```

Content model

```
<content>
</content>
```

Schema Declaration element eventgrp { att.EADGlobal.attributes, event+ }

<expan>

<expan> (Expansion) A generic element to designate the full form of a word that often appears as an abbreviation or acronym. Use the ABBR attribute to supply the abbreviated form for indexing or searching purposes.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

abbr — An abbreviation for a word or phrase that is expressed in an expanded form in the text; used for searching and indexing purposes. Available only in the <expan> element.
Status Optional
Datatype

Member of model.phrase.basic.norefs

Contained by EAD: abstract archref bibref creation descrules dimensions emph entry event extrefloc item label langmaterial langusage materialspec origination p physdesc physfacet physloc ref refloc repository subtitle titleproper unitdate unitid unittitle

May contain Character data only

Note See also related element Abbreviation <abbr>.

Example

```
<note xmlns="urn:isbn:1-931666-22-9">
 <p>
  <expan abbr="ALS">Autograph Letter Signed</expan>
 </p>
</note>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element expan { att.EADGlobal.attributes, attribute abbr { text }?, text }
```

<extent>

<extent> (Extent) A <physdesc> subelement for information about the quantity of the materials being described or an expression of the physical space they occupy. Includes such traditional archival measurements as cubic and linear feet and meters; also includes counts of microfilm reels, photographs, or other special formats, the number of logical records in a database, or the volume of a data file in bytes.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.labeled (*@label*)

unit — **Status** Optional
Datatype

Contained by EAD: physdesc

May contain Character data only

Note Repeat the element when more than one type or unit of extent is provided, such as, when both linear feet and quantity of containers are given. Use the UNIT attribute to indicate the measurement unit, e.g., "bytes" or "cubic meter."Use the <dimension> element when it is necessary to specify the size of the archival materials being described, for example, height and width.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>
  <origination>
```

```
    <persname encodinganalog="100"
     label="Creator:" source="lcnaf"> Franklin, George A. (George
       Albert).</persname>
   </origination>
   <unittitle>The George Franklin Papers, </unittitle>
   <unitdate type="inclusive">1928-1972</unitdate>
   <physdesc>
    <extent>100 boxes; </extent>
    <extent>50 linear feet</extent>
   </physdesc>
  </did>
 </archdesc>
```

Example

```
<c xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <physloc audience="internal">B:14:D</physloc>
  <container type="box">1</container>
  <container type="folder">1</container>
  <unittitle>Abbinger-Aldrich</unittitle>
  <physdesc>
   <extent>14 letters</extent>
  </physdesc>
 </did>
</c>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element extent
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.labeled.attributes,
   attribute unit { text }?,
   ( text | m.phrase.basic )*
}
```

<extptr/>

<extptr/> (Extended Pointer) An empty linking element that uses attributes to connect the EAD document to an external electronic object, which is not part of the materials being described. Examples include graphic representations of a repository's seal or logo, and pointers to an institution's web page.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.phrase.bare

Contained by EAD: abstract addressline archref author bibref bibseries container corpname creation date descrules dimensions edition emph entry event extrefloc famname function genreform geogname head head01 head02 imprint item label langmaterial language langusage legalstatus materialspec name num occupation

	origination p persname physdesc physfacet physloc publisher ref refloc repository runner sponsor subarea subject subtitle title titleproper unitdate unitid unittitle
May contain	Empty element
Note	Use the ENTITYREF or HREF attribute to identify the external object.Do not confuse with the Pointer <ptr/> element, which is an internal link for movement from one place in a finding aid to another place in the same finding aid. While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.
Example	<frontmatter xmlns="urn:isbn:1-931666-22-9"> <titlepage> <titleproper>Inventory of the Rietta Hines Herbert Papers, 1940-1969</titleproper> <author>Processed by: Debra Carter</author> <publisher>Schomburg Center for Research in Black Culture<lb/> <extptr linktype="simple" entityref="phyllis" title="Image of Phyllis Wheatley" actuate="onload" show="embed"/> <lb/> The New York Public Library</publisher> <date>August, 1977</date> <!--&schtp;--> © <date>1999 </date> The New York Public Library, Astor, Lenox and Tilden Foundations. All rights reserved. </titlepage> </frontmatter>
Content model	<content> </content>
Schema Declaration	element extptr { att.EADGlobal.attributes, att.xlink.attributes, empty }

<extptrloc/>

<extptrloc/> (Extended Pointer Location) The location of an Extended Pointer <extptr/> that is a resource in an extended link.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)
Member of	model.extended.els
Contained by	EAD: daogrp linkgrp
May contain	Empty element
Note	While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Content model

```
<content>
</content>
```

Schema Declaration element extptrloc { att.EADGlobal.attributes, att.xlink.attributes, empty }

<extref>

<extref> (Extended Reference) A linking element that can include text and subelements as part of its reference to an electronic object that is external to the EAD document.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.refs

Contained by EAD: abstract archref bibliography bibref creation descrules dimensions emph entry event item label langmaterial langusage materialspec origination otherfindaid p physdesc physfacet physloc ref relatedmaterial repository separatedmaterial unitdate unitid unittitle

May contain EAD: archref bibref ref title

Note Use the ENTITYREF or HREF attribute to identify the external object.Use the <ref> element to point to another location within the EAD document.
While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Chronology</head>
 <chronlist> . . . <chronitem>
   <date normal="199510">October 1995</date>
   <event>
    <extref linktype="simple"
     entityref="nobelsite" title="Nobel Prize eMuseum"
     actuate="onrequest" show="new">Awarded Nobel Prize in Physics by the
         Royal Swedish Academy of Sciences.</extref>
   </event>
  </chronitem> . . . </chronlist>
</bioghist>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element extref
{
   att.EADGlobal.attributes,
   att.xlink.attributes,
   ( text | m.para.content.norefs | bibref | title | archref | ref )*
}
```

<extrefloc>

<extrefloc> (Extended Reference Location) The location of an Extended Reference <extref> that is a resource in an extended link.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)
Member of	model.extended.els
Contained by	EAD: daogrp linkgrp
May contain	EAD: abbr address blockquote chronlist corpname date emph expan extptr famname function genreform geogname lb list name note num occupation origination persname ptr repository subject table unitdate unittitle
Note	While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<relatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>The Society also has records of other conservation
   organizations in Minnesota.</p>
 <p>
  <linkgrp linktype="extended">
   <extrefloc href="http://www.someserver.edu/findaids/3270.xml">
    <archref>Issak Walton League of Minnesota</archref>
   </extrefloc>
   <extrefloc href="http://www.someserver.edu/findaids/9248.xml">
    <archref>Minnesota Audubon Council</archref>
   </extrefloc>
   <extrefloc entityref="FBWW">
    <archref>Friends of the Boundary Waters
        Wilderness</archref>
   </extrefloc>
   <extrefloc href="http://www.someserver.edu/findaids/23145.sgm">
    <archref>Minnesota Emergency Conservation
        Committee</archref>
   </extrefloc>
  </linkgrp>
 </p>
</relatedmaterial>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element extrefloc
{
   att.EADGlobal.attributes,
   att.xlink.attributes,
   ( text | model.para.content.norefs )*
}
```

<famname>

<famname> (Family Name) The proper noun designation for a group of persons closely related by blood or persons who form a household. Includes single families and family groups, e.g., Patience Parker Family and Parker Family.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*) att.roled (*@role*)

Member of model.access

Contained by EAD: bibref controlaccess entry event extrefloc indexentry item label namegrp origination p physdesc physfacet ref refloc unittitle

May contain EAD: emph extptr lb ptr

Note All names in a finding aid do not have to be tagged. One option is to tag those names for which access other than basic, undifferentiated keyword retrieval is desired. Use of authorized forms is recommended to facilitate access to the names within and across finding aid systems. The <famname> element may be used in text elements such as <p>. To indicate a family name with major representation in the materials being described, nest <famname> within the <controlaccess> element.The ROLE attribute can be used to specify the relationship(s) of the name to the materials being described, for example, "compiler," "creator," "collector," or "subject." The NORMAL attribute can be used to provide the authority form of a name that has been encoded with <famname> in narrative text, e.g., within a paragraph. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the name or cross references for alternative forms of the name and related names. Use the SOURCE attribute to specify the vocabulary from which the name has been taken and/or the RULES attribute to specify the descriptive rules followed when forming the name.
See also the related elements <controlaccess>, <corpname>, <persname>, and <name>.
The <famname> element is comparable to MARC fields 100, 600, 700.

Example

```
<indexentry xmlns="urn:isbn:1-931666-22-9">
 <famname>Hely-Hutchinson family</famname>
 <indexentry>
  <genreform> Pedigree, 20th cent.</genreform>
  <ref linktype="simple" role="internal"
   target="EngC5769-f74" show="replace" actuate="onrequest">MS. Eng. c. 5769,
     fol. 74</ref>
 </indexentry>
</indexentry>
```

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>[...]</did> . . . <controlaccess>
  <head>Controlled Vocabulary Indexing Terms:</head>
  <controlaccess>
   <head>Subjects:</head>
   <famname encodinganalog="600"
    source="lcnaf">Ferry
       family.</famname>
   <geogname encodinganalog="651"
    source="lcsh">Ferry Field
       (University of Michigan)</geogname>
  </controlaccess>
```

```
 </controlaccess>
</archdesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element famname
{
  att.EADGlobal.attributes,
  att.access.attributes,
  att.roled.attributes,
  ( text | model.phrase.bare )*
}
```

<filedesc>

<filedesc> (File Description) A required subelement of the <eadheader> that bundles much of the bibliographic information about the finding aid, including its author, title, subtitle, and sponsor (all in the <titlestmt>), as well as the edition, publisher, publishing series, and related notes (encoded separately).

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: eadheader

May contain EAD: editionstmt notestmt publicationstmt seriesstmt titlestmt

Note This element has been modeled on a Text Encoding Initiative (TEI) DTD element and includes the following subelements, in this order: a required <titlestmt>, an optional <editionstmt>, an optional <publicationstmt>, an optional <seriesstmt>, and an optional <notestmt>. The <filedesc> provides information that is helpful for citing a finding aid in a bibliography or footnote. Institutions that catalog finding aids separately from the archival materials being described might use the <filedesc> elements to build a basic bibliographic record for the finding aid.Do not confuse with the <profiledesc> element, which describes the encoding of the finding aid. Do not confuse with <archdesc> elements, which refer to the materials being described rather than the finding aid itself.

Example

```
<eadheader xmlns="urn:isbn:1-931666-22-9">
 <eadid>[. . .]</eadid>
 <filedesc>
  <titlestmt>
   <titleproper>Guide to the Bank of Willows Records,
   <date>1880-1905</date>
   </titleproper>
  </titlestmt>
  <publicationstmt>

<!--&amp;amp;hdr-cst-spcoll;-->
   <date>© 1999</date>
   <p>The Board of Trustees of Stanford University. All
      rights reserved.</p>
  </publicationstmt>
 </filedesc>
 <profiledesc>[. . .]</profiledesc>
```

```
</eadheader>
```

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper>Inventory of the Otis Turner Papers,
     1978-1990</titleproper>
  <author>Processed by Hanna Bailey</author>
 </titlestmt>
 <publicationstmt>

<!--&amp;amp;hdrscm;-->
  <p>© <date>2000</date> The New York Public Library. Astor,
     Lenox and Tilden Foundations. All rights reserved.</p>
 </publicationstmt>
</filedesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element filedesc
{
   att.EADGlobal.attributes,
   ( titlestmt, editionstmt?, publicationstmt?, seriesstmt?, notestmt? )
}
```

<fileplan>

<fileplan> (File Plan) Information about any classification scheme used for arranging, storing, and retrieving the described materials by the parties originally responsible for creating or compiling them. A filing plan is usually identified by the type of system used, e.g., alphabetical, numerical, alpha-numerical, decimal, color-coded, etc. It is often hierarchical and may include the filing guidelines of the originating organization. Additional types include a drawing of a room layout or a scientific scheme.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp fileplan

May contain EAD: fileplan head

Note Do not confuse with Other Finding Aid <otherfindaid> which contains references to additional descriptions of the material rather than descriptions of classification schemes by which the materials might still be arranged.In EAD Version 1.0 fileplan was a subelement of Adjunct Descriptive Data <add>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <add> when converting finding aids encoded in EAD V1.0 to EAD 2002.

Example

```
<fileplan xmlns="urn:isbn:1-931666-22-9">
 <head>File List</head>
 <note>
  <p>The list below outlines the classification system used
```

```
    for the central files of Vice President Mondale's
    office. This structure assigned alpha-numeric codes to
    primary subjects and to secondary and tertiary
    subdivisions thereunder.</p>
  </note>
  <fileplan>
   <head>AGRICULTURE (AG)</head>
   <list type="ordered">
    <defitem>
     <label>1</label>
     <item>Home Economics</item>
    </defitem>
    <defitem>
     <label>2</label>
     <item>Horticulture</item>
    </defitem>
    <defitem>
     <label>3</label>
     <item>Marketing</item>
    </defitem>
    <defitem>
     <label>4</label>
     <item>Price Support</item>
    </defitem>
   </list>
  </fileplan>
  <fileplan>
   <head>ARTS (AR)</head>
   <list type="ordered">
    <defitem>
     <label>1</label>
     <item>Languages</item>
    </defitem>
    <defitem>
     <label>2</label>
     <item>Museums</item>
    </defitem>
    <defitem>
     <label>3</label>
     <item>Music</item>
    </defitem>
    <defitem>
     <label>4</label>
     <item>Painting/Drawing</item>
    </defitem>
   </list>
  </fileplan>
 </fileplan>
```

Content model

```
 <content>
 </content>
```

Schema Declaration element fileplan { att.EADGlobal.attributes, head?, (m.blocks | fileplan)+ }

<frontmatter>

<frontmatter> (Front Matter) A wrapper element that bundles prefatory text found before the start of the Archival Description <archdesc>. It focuses on the creation, publication, or use of the finding aid rather than information about the materials being described. Examples include a title page, preface, dedication, and instructions for using a finding aid. The optional <titlepage> element within <frontmatter> can be used to repeat selected information from the <eadheader> to generate a title page that follows local preferences for sequencing information. The other <frontmatter> structures, such as a dedication, are encoded as Text Divisions s, with a <head> element containing word(s) that identify the nature of the text.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: ead
May contain EAD: div titlepage
Example

```
<frontmatter xmlns="urn:isbn:1-931666-22-9">
 <titlepage>
  <titleproper>Register of the Gibbons (Stuart C.) Papers,
  <date>1955-1964</date>
  </titleproper>
  <num>Collection number: Ms28</num>
  <publisher>San Joaquin County Historical Society and Museum <lb/>
   <extptr actuate="onload" show="embed"
    entityref="sjmlogo"/>
   <lb/> Lodi, California</publisher>

<!--&amp;tp-cstoh;-->
  <list type="deflist">
   <defitem>
    <label>Processed by: </label>
    <item>Don Walker</item>
   </defitem>
   <defitem>
    <label>Date Completed: </label>
    <item>1997</item>
   </defitem>
   <defitem>
    <label>Encoded by: </label>
    <item>Don Walker</item>
   </defitem>
  </list>
  <p>© 2000 San Joaquin County Historical Society &amp;
     Museum. All rights reserved.</p>
 </titlepage>
</frontmatter>
```

Content model

```
<content>
</content>
```

Schema

Declaration element frontmatter { att.EADGlobal.attributes, titlepage?, div* }

<function>

<function> (Function) Terms for the spheres of activities and processes that generated the described materials. Such terms often provide useful access points to the materials, especially for corporate, government, or institutional records. Examples include: collecting taxes and entertaining.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*)

Member of model.access

Contained by EAD: controlaccess entry event extrefloc indexentry item label namegrp p physdesc physfacet ref refloc unittitle

May contain EAD: emph extptr lb ptr

Note All functions mentioned in a finding aid do not have to be tagged. One option is to tag those functions for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary forms is recommended to facilitate access to the functions within and across finding aid systems. The <function> element may be used in text elements such as <p>. To indicate a function with major representation in the materials being described, nest <function> within the <controlaccess> element.Use the SOURCE attribute to specify the vocabulary from which the term has been taken. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the function or cross references for alternative forms of a function term.
Do not confuse with <occupation>, which designates a type of work or business and is often associated with personal papers.
See also the related access elements under <controlaccess>.
The <function> element is comparable to MARC field 657.

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Index Terms</head>
 <p>These records are indexed under the following headings in the
   catalog of the Minnesota Historical Society. Researchers
   wishing to find related materials should search the catalog
   under these index terms.</p>
 <controlaccess>
  <head>Government Functions:</head>
  <function encodinganalog="657"
   source="aat">Law
   enforcing.</function>
  <function encodinganalog="657"
   source="aat">Convicting.</function>
 </controlaccess>
</controlaccess>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element function
{
```

```
    att.EADGlobal.attributes,
    att.access.attributes,
    ( text | model.phrase.bare )*
  }
```

<genreform>

<genreform> (Genre/Physical Characteristic) A term that identifies the types of material being described, by naming the style or technique of their intellectual content (genre); order of information or object function (form); and physical characteristics. Examples include: account books, architectural drawings, portraits, short stories, sound recordings, and videotapes.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*)
Member of	model.access
Contained by	EAD: controlaccess entry event extrefloc indexentry item label namegrp p physdesc physfacet ref refloc unittitle
May contain	EAD: emph extptr lb ptr
Note	All genres and forms of material mentioned in a finding aid do not have to be tagged. One option is to tag those <genreform> terms for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary terms is recommended to facilitate access to the information within and across finding aid systems. The <genreform> element may be used in text elements such as <p>. To indicate a function with major representation in the materials being described, nest <genreform> within the <controlaccess> element. To associate a <genreform> term with more detailed physical characteristics, use <genreform>> within the <physdesc> or <physfacet> elements.Use the SOURCE attribute to specify the vocabulary from which the term has been taken. The NORMAL attribute can be used to provide the authority form of a term that has been encoded with <genreform> in narrative text, e.g., within a paragraph. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the term or cross references for alternative forms of a genre term. See also the related access elements under <controlaccess>. The <genreform> element is comparable to ISAD(G) data element 3.1.5 and MARC field 655, and, when used in conjunction with <extent>, to MARC field 300.

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Index Terms</head>
 <controlaccess>
  <head>Physical Characteristics of Materials in the
    Collection:</head>
  <genreform encodinganalog="655$a"
   source="gmgpc">Architectural drawings</genreform>
  <genreform encodinganalog="655$a"
   source="gmgpc">Photographs</genreform>
 </controlaccess>
</controlaccess>
```

Example

```
<scopecontent xmlns="urn:isbn:1-931666-22-9">
 <head>Scope and Content of the Collection</head>
 <p>Although the bulk of the collection is composed of
 <genreform>letters</genreform>, <genreform>portrait
    photographs </genreform>appear in several series.</p>
```

```
</scopecontent>
```

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>[...]</did>
 <c02 level="file">
  <did>
   <unittitle>Diaries, </unittitle>
   <unitdate type="inclusive">1820-1864</unitdate>
   <physdesc>
    <extent>14
    </extent>
    <genreform>diaries</genreform> bound in
   <physfacet type="cover material">red
        leather</physfacet>
   </physdesc>
  </did>
 </c02>
</c01>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element genreform
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.access.attributes,
   ( text | model.phrase.bare )*
}
```

<geogname>

<geogname> (Geographic Name) The proper noun designation for a place, natural feature, or political jurisdiction. Examples include: Appalachian Mountains; Baltimore, Md.; Chinatown, San Francisco; and Kew Gardens, England.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*) att.roled (*@role*)
Member of	model.access
Contained by	EAD: controlaccess entry event extrefloc imprint indexentry item label namegrp p physdesc physfacet ref refloc unittitle
May contain	EAD: emph extptr lb ptr
Note	All names in a finding aid do not have to be tagged. One option is to tag those names for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary names is recommended to facilitate access to the names within and across finding aid systems. The <geogname> element may be used in text elements such as <p>. To indicate a place name with major representation in the materials being described, nest <geogname> within the <controlaccess> element.The ROLE attribute can be used to specify the relationship(s) of the name to the materials being described, for example, "subject." The NORMAL attribute can be used to provide the authority form of a term that has been encoded with <geogname> in narrative text, e.g., within a

paragraph. Use the SOURCE attribute to specify the vocabulary from which the name has been taken and/or the RULES attribute to specify the descriptive rules followed when forming the name. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the name or cross references for alternative forms of the name and related names. See also the related access elements under <controlaccess>.
The <geogname> element is comparable to MARC fields 651 and 752.

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Controlled Vocabulary Indexing Terms:</head>
 <controlaccess>
  <head>Subjects:</head>
  <famname encodinganalog="600"
   source="lcnaf">Ferry
   family.</famname>
  <geogname encodinganalog="651"
   source="lcsh">Ferry Field
    (University of Michigan)</geogname>
 </controlaccess>
</controlaccess>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element geogname
{
   att.EADGlobal.attributes,
   att.access.attributes,
   att.roled.attributes,
   ( text | model.phrase.bare )*
}
```

<head>

<head> (Heading) A generic element that designates the title or caption for a section of text, including a list. When a <head> is used, it should be the first subelement, followed by one or more other elements.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

althead	An alternative short form of the heading element <head> that might be used, for example, to create a running header.	
	Status	Optional
	Datatype	

Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 chronlist controlaccess custodhist daodesc descgrp did div dsc dscgroup fileplan index list odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial table userestrict

May contain EAD: emph extptr lb ptr

Note Do not confuse with the <listhead> subelements <head01> and <head02>, which designate headings for columns in a list. A <thead> element is used for column

heads in a table.

Example
```
<chronlist xmlns="urn:isbn:1-931666-22-9">
 <head>Publications List</head>
 <listhead>
  <head01>Publication Year</head01>
  <head02>Book Title</head02>
 </listhead>
 <chronitem>[...]</chronitem>
</chronlist>
```

Example
```
<bioghist xmlns="urn:isbn:1-931666-22-9" id="PRO123">
 <head>Administrative History</head>
 <p>In October 1964, the incoming Labour government created new
   office of Secretary of State for Economic Affairs (combined
   with First Secretary of State) and set up the Department of
   Economic Affairs under the Ministers of the Crown Act 1964
   to carry primary responsibility for long term economic
   planning.</p>
</bioghist>
```

Content model
```
<content>
</content>
```

Schema Declaration
```
element head
{
   att.EADGlobal.attributes,
   attribute althead { text }?,
   ( text | model.phrase.bare )*
}
```

<head01>

<head01> (First Heading) A formatting element within <listhead> that designates the heading over the first column in a multicolumn list.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: listhead

May contain EAD: emph extptr lb ptr

Note Do not confuse with the generic <head> element, which designates a heading for an entire list or other section of text. Do not confuse with the <thead> element, which is used for column heads in a table.

Example
```
<chronlist xmlns="urn:isbn:1-931666-22-9">
 <head>Publications List</head>
 <listhead>
  <head01>Publication Year</head01>
  <head02>Book Title</head02>
 </listhead>
 <chronitem>
  <date type="publication">1928</date>
  <event>
   <title render="italic">The Happy Little
      Lamb</title>
```

```
  </event>
 </chronitem> . . . </chronlist>
```

Content model

```
<content>
</content>
```

Schema Declaration element head01 { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<head02>

<head02> (Second Heading) A formatting element within <listhead> that designates the heading over the second column in a multicolumn list.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: listhead
May contain EAD: emph extptr lb ptr
Note Do not confuse with the generic <head> element, which designates a heading for an entire list or other section of text. Do not confuse with the <thead> element, which is used for column heads in a table.
Example

```
<chronlist xmlns="urn:isbn:1-931666-22-9">
 <head>Publications List</head>
 <listhead>
  <head01>Publication Year</head01>
  <head02>Book Title</head02>
 </listhead>
 <chronitem>
  <date type="publication">1928</date>
  <event>
   <title render="italic">The Happy Little
      Lamb</title>
  </event>
 </chronitem> . . . </chronlist>
```

Content model

```
<content>
</content>
```

Schema Declaration element head02 { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<imprint>

<imprint> (Imprint) Information relating to the publication or distribution of a work cited in a Bibliographic Reference <bibref> or <unittitle>. In both elements the place of publication, name of the publisher, and date of publication can be encoded as either plain text or wrapped in the <imprint> subelements <geogname>, <publisher>, and <date>. It is seldom, if ever, appropriate to use <imprint> in a citation for an unpublished work cited in a <bibref>.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: bibref unittitle
May contain EAD: date emph extptr geogname lb ptr publisher
Example

```
<bibref xmlns="urn:isbn:1-931666-22-9">
```

```
<title render="italic">Action For Outdoor Recreation For
  America.</title>, <imprint>
 <geogname>Washington, D.C.</geogname>: <publisher>Citizen's
   Committee For The Outdoor Recreation Resources Review
   Commission Report</publisher>, <date type="publication" normal="1964">1964
</date>. </imprint>
</bibref>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element imprint
{
  att.EADGlobal.attributes,
  ( text | model.phrase.bare | publisher | geogname | date )*
}
```

<index>

<index> (Index) A list of key terms and reference pointers that have been assembled to enhance access to the materials being described. The <index> can also serve as a helpful alphabetical overview of subjects, correspondents, photographers, or other entities represented in the collection. This back-of-the volume <index> may provide hypertext links, or it may note the container numbers useful for locating the position in the finding aid where the indexed material appears.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: index

May contain EAD: address blockquote chronlist head index indexentry list listhead note p table

Note The <index> is assumed to be text that has to be tagged, not text generated automatically from the encoded finding aid. In some cases, the <index> repeats terms and names found elsewhere in the finding aid. In other cases, such as in some literary manuscript collections, the <index> may be the only place where a name is listed, and the references point to one or more files, which include letters from that person or corporate body, but which are described only in general terms, e.g., "Correspondents T-Z."The <index> should contain <indexentry> elements, which consist of an access element, such as <name> or <subject>, followed by a Pointer <ptr/>, Pointer Group <ptrgrp>, or Reference <ref> element. Plain text cannot be used in an <indexentry>. If the <indexentry> elements are expected to provide access points other than basic keyword retrieval, use authority file terms to facilitate access to the information within and across finding aid systems.
In EAD Version 1.0 <index> was a subelement of Adjunct Descriptive Data <add>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <add> when converting finding aids encoded in EAD V1.0 to EAD 2002.

Example

```
<index xmlns="urn:isbn:1-931666-22-9">
 <head>Photographer Index</head>
 <p>Names of photographers and studios--and the cities and states
```

```
   in which they operated--are usually noted as they appear on
   the photographs (usually stamped or written on the versos).
   Corporate names appear in direct order; personal names in
   inverted order (i.e., filed by surname). Rectos and versos
   of photographs were microfilmed to capture information
   exactly as it appears on the photographs. To locate a
   specific photographer/studio, a user should consider all
   possible forms of entry (corporate and personal), browse the
   index under these forms, identify which LOT(s) contain
   photographs by that photographer/studio, then browse the
   relevant LOT on the microfilm to locate specific photographs
   that bear the markings of the specific
   photographer/studio.</p>
  <indexentry>
   <name>12th Air Force Photo:</name>
   <ref target="LOT13105"
    actuate="onrequest" show="replace">LOT 13105</ref>
  </indexentry>
  <indexentry>
   <name>15th Air Force Command:</name>
   <ref target="LOT13105"
    actuate="onrequest" show="replace">LOT 13105</ref>
  </indexentry>
  <indexentry>
   <name>324th Service Corp.:</name>
   <ref target="LOT13105"
    actuate="onrequest" show="replace">LOT 13105</ref>
  </indexentry>
  <indexentry>
   <name>A.L. Adams Photo Studio--Atlanta, Ga.:</name>
   <ref target="LOT13076"
    actuate="onrequest" show="replace">LOT 13076</ref>
  </indexentry>
  <indexentry>
   <name>AAA Agricultural Adjustment Agency by Cooper:</name>
   <ref target="LOT13121"
    actuate="onrequest" show="replace">LOT 13121</ref>
  </indexentry>
 </index>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element index
{
   att.EADGlobal.attributes,
   head?,
   model.blocks*,
   ( ( listhead?, indexentry+ ) | index+ )
}
```

<indexentry>

<indexentry> (Index Entry) A formatting element that pairs an index term with one or more linking elements. Each <indexentry> contains an access element, such as <namegrp> or <subject>; an optional <note> that can divide the entry into subcategories, e.g., "during office" and "family life"; followed by optional Pointer <ptr/>, Pointer Group <ptrgrp>, or Reference <ref> elements. Plain text cannot be used in an <indexentry>. If the <indexentry> subelements are expected to provide access points other than basic keyword retrieval, use controlled vocabulary terms to facilitate access to information within and across finding aid systems, with the SOURCE attribute to indicate which vocabulary provided the term.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: index indexentry

May contain EAD: corpname famname function genreform geogname indexentry name namegrp occupation persname ptr ptrgrp ref subject subtitle title

Note Use the Name Group <namegrp> element to bundle access element entries, e.g., several <famname> and <persname> elements, that share the same <ref>, <ptr/>, or <ptrgrp> element.Use the Pointer Group <ptrgrp> element to bundle several <ref> or <ptr/> links to a single access term. Use the <ptr/> element when no text is needed with the link. Use the <ref> element when text as well as a link are needed.

Example

```
<index xmlns="urn:isbn:1-931666-22-9">
 <indexentry>
  <name>12th Air Force Photo:</name>
  <ref target="LOT13105"
   actuate="onrequest" show="replace">LOT 13105</ref>
 </indexentry>
 <indexentry>
  <name>15th Air Force Command:</name>
  <ref target="LOT13105"
   actuate="onrequest" show="replace">LOT 13105</ref>
 </indexentry>
</index>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element indexentry
{
   att.EADGlobal.attributes,
   ( namegrp | model.access.title ),
   ( ptrgrp | ptr | ref )?,
   indexentry*
}
```

<item>

<item> (Item) A formatting element used in one of three contexts: as an entry in a simple, random, or ordered <list>; as part of a <defitem> inside a definition list; or as an entry within the <change> element. In the first instance, the <item> can be a number, word, or phrase. In a definition list, which is usually displayed as two columns, a <defitem> pairs a <label> with a corresponding

<item> containing text that defines, describes, or explains the terms or other text tagged as the <label>. In the <eadheader> <revisiondesc> <change> element, the <item> designates information about a revision to the finding aid and is often paired with a <date>.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: change defitem list
May contain EAD: abbr address archref bibref blockquote chronlist corpname date emph expan extptr extref famname function genreform geogname lb linkgrp list name note num occupation origination persname ptr ref repository subject subtitle table title unitdate unittitle
Note Do not confuse with <chronitem>, which designates entries in a Chronology List <chronlist>.See also related elements <list>, <defitem>, and <change>.
Example

```
<eadheader xmlns="urn:isbn:1-931666-22-9" langencoding="iso639-2b">
 <eadid>[...]</eadid> . . . <revisiondesc>
  <change>
   <date normal="19970505">May 5, 1997</date>
   <item>This electronic finding aid was updated to current
      markup standards by Sarah Taylor using a perl
      script. Updates included: eadheader, eadid,
      arrangement of did elements and their labels.</item>
  </change>
 </revisiondesc>
</eadheader>
```

Example

```
<list xmlns="urn:isbn:1-931666-22-9" type="deflist">
 <defitem>
  <label>ALS</label>
  <item>Autograph Letter Signed</item>
 </defitem>
 <defitem>
  <label>TLS</label>
  <item>Typewritten Letter Signed</item>
 </defitem>
</list>
```

Content model

```
<content>
</content>
```

Schema Declaration element item { att.EADGlobal.attributes, (text | model.para.content)* }

<label>

<label> (Label) A formatting element that identifies the term or concept being described, defined, or explained in a Definition List Item <defitem>. The <defitem> can be thought of as an entry in a <list> that is usually displayed in two columns: <label> followed by <item>. Each list item <defitem> contains a term or concept (called a <label>) and a definition, description, or explanation of that <label> (called an <item>).

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: defitem
May contain EAD: abbr archref bibref corpname date emph expan extptr extref famname function genreform geogname lb linkgrp name num occupation origination

persname ptr ref repository subject subtitle title unitdate unittitle

Note Do not confuse with the attribute called LABEL, which identifies the kind of information in an element for public display in the did subelements.See also related elements <list> and <defitem>.

Example
```
<list xmlns="urn:isbn:1-931666-22-9" type="deflist">
 <defitem>
  <label>ALS</label>
  <item>Autograph Letter Signed</item>
 </defitem>
 <defitem>
  <label>TLS</label>
  <item>Typewritten Letter Signed</item>
 </defitem>
</list>
```

Content model
```
<content>
</content>
```

Schema Declaration element label { att.EADGlobal.attributes, (text | model.phrase.plus)* }

<langmaterial>

<langmaterial> (Language of the Material) A prose statement enumerating the language(s) of the archival materials found in the unit being described.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*)

Member of model.did

Contained by EAD: archref did

May contain EAD: abbr archref bibref emph expan extptr extref language lb linkgrp ptr ref subtitle title

Note Language of the material may also be recorded in coded form in the LANGCODE attribute in the <language> subelement using the ISO 639-2b three-letter language codes.Do not confuse with the Language Usage <langusage> element which specifies the language(s) in which the finding aid is written. See also the description for the <language> element.
The <langmaterial> element is comparable to the ISAD(G) data element 3.4.3 and MARC field 546.

Example
```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>
  <unittitle>Correspondence, </unittitle>
  <unitdate type="inclusive">1854-1902. </unitdate>
  <physdesc>4 boxes</physdesc>
  <langmaterial>Correspondence in <language>French, </language>
   <language>German, </language>and
  <language>English.</language>
  </langmaterial>
 </did>
</c01>
```

Example
```
<eadheader xmlns="urn:isbn:1-931666-22-9" langencoding="iso639-
2b">[...]</eadheader>
```

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="fonds">
 <did> . . . <langmaterial>Texte <language langcode="ara">arabe</language> et t
raduction <language langcode="fre">française</language> par Lacroix fils
  </langmaterial>
 </did> . . . </archdesc>
```

Example

```
<did xmlns="urn:isbn:1-931666-22-9">
 <unitid label="Reference Code">DL 42</unitid>
 <unittitle label="Title">Duchy of Lancaster: Cartularies,
   Enrolments, Surveys and other Miscellaneous
   Books</unittitle>
 <unitdate label="Creation Dates"
  type="inclusive">13th Century
   -1894</unitdate>
 <langmaterial label="Language(s)">
  <language langcode="eng">English</language>, <language langcode="fre">Fre
nch</language> and <language langcode="lat">Latin</language>
 </langmaterial>
</did>
```

Schematron

```
<langmaterial> COULD contain a <language> element.
<s:rule context="ead:langmaterial">
<s:assert role="COULD" test="ead:language">langmaterial COULD have a
language sub element</s:assert> </s:rule>
```

Content model

```
<content/>
```

Schema Declaration

```
element langmaterial
{
   att.EADGlobal.attributes,
   att.labeled.attributes,
   ( text | model.phrase.basic | language )*
}
```

<language>

<language> (Language) A subelement of <langusage> within the <profiledesc> portion of the <eadheader> that specifies the language or communication system in which the finding aid is written. For bilingual or multilingual finding aids, either identify each language in a separate <language> element, or mention only the predominant language. The LANGCODE attribute can be used to provide the three-letter ISO 639-2b code for the language.

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.langcode (@*langcode*) att.scriptcode (@*scriptcode*)

Contained by EAD: langmaterial langusage

May contain EAD: emph extptr lb ptr

Note Also a subelement of <langmaterial> within <did>, where it specifies the language of the materials being described. In this instance, the LANGCODE attribute may be used to provide the three-letter ISO 639-2b code which is the equivalent of the MARC 041 field.The SCRIPTCODE attribute may be used to specify the ISO 15924 code for the script in which the language is written.

Example

```
<eadheader xmlns="urn:isbn:1-931666-22-9" langencoding="iso639-2b">
 <eadid>[...]</eadid>
```

```
 <filedesc>[...]</filedesc>
 <profiledesc>
  <creation>[...]</creation>
  <langusage>Bilingual finding aid written in <language langcode="fre">French</la
nguage> and <language langcode="eng">English.</language>
  </langusage>
 </profiledesc>
</eadheader>
```

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>
  <unittitle>Correspondence, </unittitle>
  <unitdate type="inclusive">1854-1902.</unitdate>
  <physdesc>4 boxes</physdesc>
  <langmaterial>Correspondence in <language>French, </language>
   <language>German, </language>and
  <language>English.</language>
  </langmaterial>
 </did>
</c01>
```

Schematron <language> MUST have a *langcode* attribute. See also the rule on *langcode* and ISO 639: ISO639rule

```
<s:rule context="ead:language">
<s:assert role="MUST" test="@langcode">language MUST have a langcode
attribute</s:assert> </s:rule>
```

Schematron <language> MUST have a *scriptcode* attribute. See also the rule on *scriptcode* and ISO 15924: ISO15924rule

```
<s:rule context="ead:language">
<s:assert role="SHOULD" test="@scriptcode">language SHOULD have a
scriptcode attribute</s:assert> </s:rule>
```

Content model

```
<content/>
```

Schema Declaration

```
element language
{
   att.EADGlobal.attributes,
   att.langcode.attributes,
   att.scriptcode.attributes,
   ( text | model.phrase.bare )*
}
```

<langusage>

<langusage> (Language Usage) An optional subelement within the <profiledesc> portion of the <eadheader> that provides a statement about languages, sublanguages, and dialects represented in an encoded finding aid. The language(s) in which the finding aid is written can be further specified using the <language> subelement within <langusage>. For bilingual or multilingual finding aids, either identify each language in a separate <language> element, or mention only the predominant language.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: profiledesc

May contain	EAD: abbr archref bibref emph expan extptr extref language lb linkgrp ptr ref subtitle title
Note	The <langusage> element is modeled on a Text Encoding Initiative (TEI) DTD element.
Example	<eadheader xmlns="urn:isbn:1-931666-22-9" langencoding="iso639-2b"> <eadid>[...]</eadid> <filedesc>[...]</filedesc> <profiledesc> <creation>[...]</creation> <langusage>Bilingual finding aid written in <language langcode="fre">French</language> and <language langcode="eng">English.</language> </langusage> </profiledesc> </eadheader>
Content model	<content> </content>

Schema Declaration	element langusage
	{
	att.EADGlobal.attributes,
	(text | model.phrase.basic | language)*
	}

<lb/>

<lb/> (Line Break) An empty formatting element that forces text to start on a new line at a point chosen by the author rather than a linewrap algorithm or style sheet. Use only when a line break is needed within an element, for example, within a <titlepage>. Use a style sheet to specify line breaks between elements.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.render
Contained by	EAD: abstract addressline archref author bibref bibseries container corpname creation date descrules dimensions edition emph entry event extrefloc famname function genreform geogname head head01 head02 imprint item label langmaterial language langusage legalstatus materialspec name num occupation origination p persname physdesc physfacet physloc publisher ref refloc repository resource runner sponsor subarea subject subtitle title titleproper unitdate unitid unittitle
May contain	Empty element
Example	<publisher xmlns="urn:isbn:1-931666-22-9"> San Joaquin County Historical Society and Museum <lb/> <extptr actuate="onload" show="embed" entityref="sjmlogo"/> <lb/> Lodi, California </publisher>
Content model	<content> </content>
Schema	

Declaration element lb { att.EADGlobal.attributes, empty }

<legalstatus>

<legalstatus> (Legal Status) The statutorily-defined status of the materials being described in the encoded finding aid, as, for example, defined by the Public Records Act of 1958 in the United Kingdom.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)

Contained by EAD: accessrestrict

May contain EAD: date emph extptr lb ptr

Note The <legalstatus> element is comparable to the ISAD(G) data element 3.4.1 and MARC field 506.

Example

```
<did xmlns="urn:isbn:1-931666-22-9">
 <unitid label="Reference Code">PREM 8</unitid>
 <unittitle label="Title">Prime Minister's Office: Correspondence
   and Papers</unittitle>
 <unitdate label="Creation Dates"
  type="inclusive">1935-1951</unitdate>
</did>
<accessrestrict xmlns="urn:isbn:1-931666-22-9">
 <legalstatus>Public Record(s)</legalstatus>
</accessrestrict>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element legalstatus
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   ( text | model.phrase.bare | date )*
}
```

<linkgrp>

<linkgrp> (Linking Group) A wrapper element that contains two or more linking elements which form an extended link group so as to enable a set of multidirectional, out-of-line links.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.refs

Contained by EAD: abstract bibliography creation descrules dimensions emph entry event item label langmaterial langusage materialspec origination otherfindaid p physdesc physfacet physloc relatedmaterial repository separatedmaterial unitdate unitid unittitle

May contain EAD: arc extptrloc extrefloc ptrloc refloc resource

Example

```
<relatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>The Society also has records of other conservation
```

```
  organizations in Minnesota.</p>
 <p>
  <linkgrp linktype="extended">
   <extrefloc href="http://www.someserver.edu/findaids/3270.xml">
    <archref>Issak Walton League of Minnesota</archref>
   </extrefloc>
   <extrefloc href="http://www.someserver.edu/findaids/9248.xml">
    <archref>Minnesota Audubon Council</archref>
   </extrefloc>
   <extrefloc entityref="FBWW">
    <archref>Friends of the Boundary Waters
        Wilderness</archref>
   </extrefloc>
   <extrefloc href="http://www.someserver.edu/findaids/23145.sgm">
    <archref>Minnesota Emergency Conservation
        Committee</archref>
   </extrefloc>
  </linkgrp>
 </p>
</relatedmaterial>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element linkgrp
{
   att.EADGlobal.attributes,
   att.xlink.attributes,
   model.extended.els+
}
```

<list>

<list> (List) A formatting element that contains a series of words or numerals (called <item>s) separated from one another and arranged in a linear, often vertical sequence.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

type	characterizes the element in some sense, using any convenient classification scheme or typology.	
	Derived from	att.typed
	Status	Optional
	Datatype	

Member of model.inter.noquote

Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist blockquote controlaccess custodhist daodesc descgrp div dsc dscgroup entry event extrefloc index item note odd originalsloc otherfindaid p phystech prefercite processinfo ref refloc relatedmaterial revisiondesc scopecontent separatedmaterial userestrict

May contain EAD: defitem head item listhead

Note The TYPE attribute is used to identify and format the list. The choices are: "simple," "deflist," "marked," and "ordered." In a "simple" list, <item>s are not

numbered or bulleted. In a "deflist" or definition list, each <defitem> pairs a <label> with a corresponding <item> containing the text that defines, describes, or explains the term or other text tagged as the <label>. In a "marked" list, the sequence of the list items is not critical, and a bullet, box, dash, or other character is displayed at the beginning of each <item>. In an "ordered" list, the sequence of the list <item>s is important, and each list <item> is lettered or numbered.See also the related elements <defitem> and <item>.

Example

```
<bibliography xmlns="urn:isbn:1-931666-22-9">
 <head>Major Works of Archibald MacLeish</head>
 <list type="ordered" numeration="arabic">
  <item>
   <bibref>
    <imprint>
     <date>1924</date>
    </imprint>
    <title render="italic">The Happy Marriage,
        and Other Poems</title> (Boston and New York:
      Houghton Mifflin. 79 pp.) </bibref>
  </item>
  <item>
   <bibref>
    <imprint>
     <date>1925</date>
    </imprint>
    <title render="italic">The Pot of Earth</title>
      (Boston and New York: Houghton Mifflin. 44
      pp.)</bibref>
  </item> . . . </list>
</bibliography>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element list
{
   att.EADGlobal.attributes,
   attribute type { data.enumerated }?,
   head?,
   ( item+ | ( listhead?, defitem+ ) )
}
```

<listhead>

<listhead> (List Heading) A formatting element that groups headings for columns in a definition, marked, or ordered list, Chronology List <chronlist>, or <index>. The headings are called <head01> and <head02>.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: chronlist index list
May contain EAD: head01 head02
Example <chronlist xmlns="urn:isbn:1-931666-22-9">

```
<head>Publications List</head>
<listhead>
 <head01>Publication Year</head01>
 <head02>Book Title</head02>
</listhead>
<chronitem>[...]</chronitem>
</chronlist>
```

Content model

```
<content>
</content>
```

Schema Declaration element listhead { att.EADGlobal.attributes, head01?, head02? }

<materialspec>

<materialspec> (Material Specific Details) Data which are unique to a particular class or form of material and which are not assigned to any other element of description. Examples of material specific details include mathematical data, such as scale for cartographic and architectural records, jurisdictional and denominational data for philatelic records, and physical presentation data for music records.

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.typed (@*type*) att.labeled (@*label*)

Member of model.did

Contained by EAD: archref did materialspec

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp materialspec num ptr ref subtitle title

Note The <matspec> element is comparable to MARC fields 254, 255, and 256.

Example

```
<c03 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did> . . . <materialspec label="Mathematical Data">
   <materialspec label="Scale:">1:10000</materialspec>
   <materialspec label="Projection:">Universal transverse
      Mercator projection</materialspec>
  </materialspec>
 </did> . . . </c03>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element materialspec
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  att.labeled.attributes,
  ( text | model.phrase.basic | num | materialspec )*
}
```

<name>

<name> (Name) The proper noun or noun phrase designation for an entity that is difficult to tag

more specifically as a <corpname>, <famname>, <geogname>, <persname>, or <title>. The <name> element may be used in place of the more specific access elements when it is not known what kind of name is being described or when a high degree of precision is unnecessary. For example, the <name> element might be used in an <indexentry> when it is not clear if the name "Bachrach" refers to a person or a photographic corporation.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*) att.roled (*@role*)

Member of model.access

Contained by EAD: bibref controlaccess entry event extrefloc indexentry item label namegrp origination p physdesc physfacet ref refloc repository unittitle

May contain EAD: emph extptr lb ptr

Note All names in a finding aid do not have to be tagged. One option is to tag those names for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary names is recommended to facilitate access to the names within and across finding aid systems. The <name> element may be used in text elements such as <p>. To indicate a name with major representation in the materials being described, nest <name> within the <controlaccess> element.The ROLE attribute can be used to specify the relationship(s) of the name to the materials being described, for example, "subject" or "photographer." The SOURCE attribute can be used to specify the vocabulary from which the name has been taken. The RULES attribute can be used to specify the descriptive rules followed when forming the name, such as AACR2R.
See also the related access elements under <controlaccess>.
The <name> element is comparable to MARC field 720, when it is not from a controlled vocabulary.

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle>
   <name>Bartleby </name>barn purchase files, </unittitle>
  <unitdate>1799.</unitdate>
  <physdesc>
   <extent>3 items, </extent>heavily
  <physfacet>foxed.</physfacet>
  </physdesc>
  <note>
   <p>Items relate to the purchase by Mr. Wigglethorpe
      from <persname normal="Brookes, Josiah">Jos. Brookes
    </persname>of a building colloquially known as the
      Bartleby barn.</p>
  </note>
 </did>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element name
{
   att.EADGlobal.attributes,
   att.access.attributes,
```

```
  att.roled.attributes,
  ( text | model.phrase.bare )*
}
```

<namegrp>

<namegrp> (Name Group) A formatting element used in an <indexentry> to group access element entries that share the same <ref>, <ptr/>, or <ptrgrp> element. A <note> is available to divide a name or term into subcategories, for example, "during office" and "family life."

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*)

Contained by EAD: indexentry

May contain EAD: corpname famname function genreform geogname name note occupation persname subject subtitle title

Example

```
<index xmlns="urn:isbn:1-931666-22-9">
 <head>Index to Correspondents and Recipients</head>
 <indexentry>
  <corpname>Bach &amp;amp; Bros.</corpname>
  <ref linktype="simple" target="NonC:21-2"
   show="replace" actuate="onrequest"> (In non correspondence)</ref>
 </indexentry>
 <indexentry>
  <namegrp>
   <corpname>Bacon and Lewis, Ltd.</corpname>
   <persname>Levering, Alexander M.</persname>
   <persname>Windom, Lucious</persname>
  </namegrp>
  <ref linktype="simple"
   target="Cres:18610408" show="replace" actuate="onrequest"> (1861 Apr. 8, AL
S, to W.W., re:
     inquiry into what to do with unsold flour)</ref>
 </indexentry> . . . </index>
```

Content model

```
<content>
</content>
```

Schema Declaration element namegrp { att.EADGlobal.attributes, (model.access.title | note)+ }

<note>

<note> (Note) A generic element that provides a short statement explaining the text, indicating the basis for an assertion, or citing the source of a quotation or other information. Used both for general comments and as an annotation for the text in a finding aid. Not used when more specific content designation elements are appropriate, e.g., <abstract>, <altformavail>, <archref>, or <scopecontent>. Do not confuse with Other Descriptive Data <odd> element, which is used within <archdesc> and <c> to designate information that is more than a short comment in a <note>.>

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*) att.typed (@*type*) att.labeled (@*label*)

show	**Status**	Optional
	Datatype	

		Legal values are:	**embed**
			new
	actuate	**Status**	Optional
		Datatype	
		Legal values are:	**onload**
			onrequest

Member of model.desc.full model.did model.inter.noquote

Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal archdesc archdescgrp archref arrangement bibliography bioghist blockquote c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 controlaccess custodhist daodesc descgrp did div dsc dscgroup entry event extrefloc index item namegrp note notestmt odd originalsloc otherfindaid p phystech prefercite processinfo ref refloc relatedmaterial scopecontent separatedmaterial userestrict

May contain EAD: address blockquote chronlist list note p table

Note The placement of a <note> is dependent on the design of the document and the purpose of the <note>. A <note> may appear at the end of the text as endnotes, at the foot of a section as footnotes or embedded within the text. One or more <note> elements may be grouped in a <notestmt> element in the <filedesc> portion of the <eadheader>. The ACTUATE and SHOW attributes can be used to mask a <note> from display until it is requested by a finding aid user.The <note> element is comparable to ISAD(G) data element 3.6.1 and MARC field 500.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did> . . . <repository label="repository"
  encodinganalog="852">
  <corpname>Library of Congress, <subarea>Prints and
       Photographs Division, </subarea>
  </corpname>
    Washington, D.C. 20540 </repository>
 <note>
  <p>For information about Prints and Photographs Division
     collections and services, see the Prints and
     Photographs Division's Reading Room Home Page:
  <extptr actuate="onrequest"
   href="http://www.loc.gov/rr/print.htm" show="new"/>
  </p>
 </note>
 </did> . . . </archdesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element note
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  att.labeled.attributes,
  attribute show { "embed" | "new" }?,
```

```
    attribute actuate { "onload" | "onrequest" }?,
    model.blocks+
}
```

<notestmt>

<notestmt> (Note Statement) An optional subelement within the <filedesc> portion of the <eadheader> that groups <note> elements, each of which contains a single piece of descriptive information about the finding aid. These <note>s are similar to the "general notes" in traditional bibliographic descriptions.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: filedesc
May contain	EAD: note
Note	The <notestmt> element is modeled on a header element found in the Text Encoding Initiative (TEI).
Example	In the California Digital Library, access points are put in the <eadheader> for system use in the resource directory. These same access points are also provided in <controlaccess> for public use.

```
<notestmt xmlns="urn:isbn:1-931666-22-9">
 <note>
  <p>
   <subject source="cdl">Arts and Humanities--Performing
      Arts--Dance</subject>
   <subject source="cdl">Arts and Humanities--Performing
      Arts--Theater</subject>
  </p>
 </note>
</notestmt>
```

Content model

```
<content>
</content>
```

Schema Declaration element notestmt { att.EADGlobal.attributes, note+ }

<num>

<num> (Number) A generic element for numeric information in any form. The <num> element is used only when it is necessary to display a number in a special way, or to identify it with a TYPE attribute. For example, an accession number in the <acqinfo> element might be designated as <*num type="accession"*>. A publication number might be designated as <publicationstmt> ... <num>no. 42<*/num*> ...

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)
Member of	model.data
Contained by	EAD: bibref bibseries entry event extrefloc item label materialspec p publicationstmt ref refloc seriesstmt subtitle title titlepage titleproper unittitle
May contain	EAD: emph extptr lb ptr
Note	Do not confuse with <container>, <unitid>, or <eadid>, which may also consist of numeric information.

Example
```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>[...]</titlestmt>
 <seriesstmt>
  <titleproper encodinganalog="440$a">Archival Inventories and
     Guides of the World; </titleproper>
  <num encodinganalog="440$v">no. 148</num>
 </seriesstmt>
</filedesc>
```

Example
```
<acqinfo xmlns="urn:isbn:1-931666-22-9">
 <p>The collection (Donor No. <num type="donor">8338</num>) was
   donated by <persname role="donor">Vonda Thomas
  </persname>and <persname role="donor"> Francine Farrow
  </persname>in March 1995.</p>
</acqinfo>
```

Content model
```
<content>
</content>
```

Schema Declaration
```
element num
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   ( text | model.phrase.bare )*
}
```

<occupation>

<occupation> (Occupation) A term identifying a type of work, profession, trade, business, or avocation significantly reflected in the materials being described.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*)

Member of model.access

Contained by EAD: controlaccess entry event extrefloc indexentry item label namegrp p physdesc physfacet ref refloc unittitle

May contain EAD: emph extptr lb ptr

Note All occupations in a finding aid do not have to be tagged. One option is to tag those occupations for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary forms is recommended to facilitate access to occupations within and across finding aid systems. The <occupation> element may be used in text elements such as <p>. To indicate an occupation with major representation in the described materials, nest <occupation> within the <controlaccess> element.Use the SOURCE attribute to specify the vocabulary from which the term has been taken. The NORMAL attribute can be used to provide the authority form of a term that has been encoded with <occupation> in narrative text, e.g., within a paragraph. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the occupation.
Do not confuse with <function>, which designates the spheres of activities and processes that generated the described materials, e.g., collecting taxes or entertaining.

	Do not confuse with the ROLE attribute available on the various name elements, e.g., <corpname>, <persname>, <famname>, etc., which may be used to specify the relationship of a name to the described materials, e.g., "compiler," "creator," "collector," or "subject." See also the related access terms under <controlaccess>. The <occupation> element is comparable to MARC field 656.
Example	<controlaccess xmlns="urn:isbn:1-931666-22-9"> <head>Selected Search Terms</head> <controlaccess> <head>Occupations:</head> <occupation encodinganalog="656">Dramatists</occupation> <occupation encodinganalog="656">Librarians of Congress</occupation> <occupation encodinganalog="656">Poets</occupation> <occupation encodinganalog="656">Public officers</occupation> </controlaccess> </controlaccess>
Content model	<content> </content>

Schema Declaration	element occupation
	{
	att.EADGlobal.attributes,
	att.access.attributes,
	(text | model.phrase.bare)*
	}

<odd>

<odd> (Other Descriptive Data) An element for information about the described materials that is not easily incorporated into one of the other named elements within <archdesc> and <c>.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp odd
May contain	EAD: address blockquote chronlist dao daogrp head list note odd p table
Note	When converting finding aids to an ideal EAD markup, some shifting of text or addition of data may be necessary to conform to the DTD's sequencing of elements and the consignment of certain elements to specific settings. The <odd> element helps to minimize conversion difficulties by designating, as "other," information that does not fit easily into one of EAD's more distinct categories.Some situations in which <odd> may be used are when the information does not correspond to another element's definition; when the information is of such mixed content as to make a single classification difficult; and when shifting the information to permit more specific content designation would be too costly or burdensome for the finding aid encoder. The first situation may occur especially when additional narrative description is required beyond

what is included in the <bioghist> and <scopecontent> elements, such as when the finding aid is describing a computer file. Applying the *type* and *encodinganalog* attributes may help provide additional content specification in situations where the unspecified <odd> is used.
Despite its wide availability under <archdesc> and <c>, the <odd> element should be used with restraint and only after carefully considering the consequences that unspecified content designation poses for searching, retrieving, and displaying information in a networked environment.
The <odd> element is comparable to ISAD(G) data element 3.6.1 and MARC field 500.

Example

Note: The Public Record Office of the United Kingdom uses a 7 level system of intellectual units devised specifically for that repository. In that system "division" is the equivalent of "subfonds" and "class" is the equivalent of "series."

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="otherlevel"
 otherlevel="division">
 <did>
  <unittitle>Records of the Industrial Division</unittitle>
  <origination>
   <corpname>Department of Economic Affairs, Industrial
      Group; </corpname>
   <corpname>Department of Economic Affairs, Industrial
      Division; </corpname>
   <corpname>Department of Economic Affairs, Industrial
      Policy; Division </corpname>
   <corpname>Department of Economic Affairs, Industrial
      Prices and Incomes Department; </corpname>
  </origination>
  <unitdate>1949-1969</unitdate>
  <physdesc>
   <extent>2 </extent>
   <genreform>classes</genreform>
  </physdesc>
 </did>
 <scopecontent>[...]</scopecontent>
 <bioghist>[...]</bioghist>
 <controlaccess>[...]</controlaccess>
 <odd>
  <list type="simple">
   <item>Department of Economic Affairs: Industrial Policy
      Group: Registered Files (1-IG and 2-IG Series) <ref actuate="onrequest" targ
et="ew26"
     show="new">EW
       26</ref>
   </item>
   <item>Department of Economic Affairs: Industrial
      Division and Industrial Policy Division: Registered
      Files (IA Series) <ref actuate="onrequest" target="ew27"
     show="new">EW 27</ref>
   </item>
  </list>
 </odd>
</c01>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element odd
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   head?,
   ( model.blocks | dao | daogrp | odd )+
}
```

<originalsloc>

<originalsloc> (Location of Originals) Information about the existence, location, availability, and/or the destruction of originals where the unit described consists of copies.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp originalsloc

May contain EAD: address blockquote chronlist head list note originalsloc p table

Note Do not confuse <originalsloc> with Alternative Form Available <altformavail>, which is used to encode information about copies of the material being described.The <originalsloc> element is comparable to ISAD(G) data element 3.5.1 and MARC field 535.

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle>Dream diary, </unittitle>
  <unitdate normal="1947/1948">1947-48</unitdate>
 </did>
 <originalsloc>
  <p>File contains photocopies of original still held by the
     donor.</p>
 </originalsloc>
</c01>
```

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>[...]</did>
 <originalsloc>
  <p>Originals destroyed after microfilming, 1981.</p>
 </originalsloc>
</c01>
```

Example

```
<c03 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>[...]</did>
 <originalsloc>
  <p>Original glass plate negatives are held by the Bailly
     family, Lunenburg, Nova Scotia.</p>
 </originalsloc>
</c03>
```

Schematron If the element <originalsloc> is not empty, you COULD try to identify if copies are

present in the EHRI portal and make a link between the two descriptions. <s:rule context="ead:originalsloc/ead:p"> <s:assert role="COULD" test="not(normalize-space(.))">If the element originalsloc is not empty, you COULD try to identify if copies are present in the EHRI portal and make a link between the two descriptions.</s:assert> </s:rule>

Content model

<content/>

Schema Declaration

element originalsloc
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  head?,
  (model.blocks | originalsloc)+
}

<origination>

<origination> (Origination) Information about the individual or organization responsible for the creation, accumulation, or assembly of the described materials before their incorporation into an archival repository. The <origination> element may be used to indicate such agents as correspondents, records creators, collectors, and dealers. Using the LABEL attribute may help identify for a finding aid reader the role of the originator, e.g., "creator," "collector," or "photographer." It is also possible to set the ROLE attribute on the name elements that are available within <origination>, i.e., <corpname>, <famname>, <name>, and <persname>.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*)

Member of model.data model.did

Contained by EAD: archref did entry event extrefloc item label p ref refloc

May contain EAD: abbr archref bibref corpname emph expan extptr extref famname lb linkgrp name persname ptr ref subtitle title

Note The <origination> element is comparable to ISAD(G) data element 3.2.1 and MARC fields 100, 110, 700, and 710.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>
  <origination label="Creator:">
   <persname encodinganalog="100"
    normal="Frisell, Toni" role="photographer">Toni
      Frisell</persname>
  </origination>
 </did>
</archdesc>
```

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" type="inventory" level="subgrp">
 <did>
  <head>Overview of the Records</head>
  <repository label="Repository:">
   <corpname>Minnesota
      Historical Society</corpname>
  </repository>
  <origination label="Creator:">
```

```
 <corpname>Minnesota. Game and
    Fish Department</corpname>
 </origination>
 <unittitle label="Title:">Game laws violation records, </unittitle>
 <unitdate label="Dates:">1908-1928</unitdate>
 <abstract label="Abstract:"> Records of prosecutions for and
   seizures of property resulting from violation of the
   state's hunting and fishing laws. </abstract>
 <physdesc label="Quantity:"> 2.25 cu. ft. (7 v. and 1 folder
   in 3 boxes) </physdesc>
 <physloc label="Location:"> See Detailed Description section
   for box location </physloc>
</did>
</archdesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element origination
{
  att.EADGlobal.attributes,
  att.labeled.attributes,
  ( text | model.phrase.basic | corpname | famname | name | persname )*
}
```

<otherfindaid>

<otherfindaid> (Other Finding Aid) Information about additional or alternative guides to the described material, such as card files, dealers' inventories, or lists generated by the creator or compiler of the materials. It is used to indicate the existence of additional finding aids; it is not designed to encode the content of those guides.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp otherfindaid
May contain	EAD: address archref bibref blockquote chronlist extref head linkgrp list note otherfindaid p ref subtitle table title
Note	Do not confuse with <fileplan>, which designates information about a particular type of access tool, known as a file plan, which explains the classification scheme used by the parties originally responsible for creating or compiling the described materials.The <archref> element may be used to give a formal citation to the other finding aid or to link to an online version of it. In EAD Version 1.0 <otherfindaid> was a subelement of Adjunct Descriptive Data <add>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <add> when converting finding aids encoded in EAD V1.0 to EAD 2002. The <otherfindaid> element is comparable to ISAD(G) data element 3.4.5.

Example

```
<otherfindaid xmlns="urn:isbn:1-931666-22-9">
 <bibref>The Society has published an expanded guide to this
   collection: <title>Guide to the Records of the American
     Crystal Sugar Company. </title> Compiled by <persname role="author">David
Carmichael; </persname>assisted by
 <persname role="author">Lydia A. Lucas </persname>and
 <persname role="author">Marion E. Matters.
  </persname>St. Paul. Division of Archives and Manuscripts.
   Minnesota Historical Society. 1985. </bibref>
</otherfindaid>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element otherfindaid
{
   att.EADGlobal.attributes,
   head?,
   ( model.blocks | model.refs | otherfindaid )+
}
```

<p>

<p> (Paragraph) One or more sentences that form a logical prose passage. A paragraph may be a subdivision of a larger composition, or it may exist alone. It is usually typographically distinct: A line space is often left blank before it; the text begins on a new line; and the first letter of the first word is often indented, enlarged, or both. The <p> element is an important textual feature, which may be used inside of more than thirty other elements. The content model of a <p> provides access to thirty-three other elements, including reference and linking elements, formatting elements, controlled access elements, and some of the Descriptive Identification <did> subelements.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.blocks

Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist blockquote controlaccess custodhist daodesc descgrp div dsc dscgroup editionstmt index note odd originalsloc otherfindaid phystech prefercite processinfo publicationstmt relatedmaterial scopecontent separatedmaterial seriesstmt userestrict

May contain EAD: abbr address archref bibref blockquote chronlist corpname date emph expan extptr extref famname function genreform geogname lb linkgrp list name note num occupation origination persname ptr ref repository subject subtitle table title unitdate unittitle

Example

```
<bioghist xmlns="urn:isbn:1-931666-22-9">
 <head>Biographical Sketch</head>
 <p>John Ferguson Godfrey was born in Toronto on December 19,
   1942. He received a B.A. (Hons.) from Trinity College,
   University of Toronto, in 1965, a M.Phil. degree from
   Balliol College, Oxford University, England, in 1967, and a
   D.Phil. degree from St. Anthony's College, Oxford
   University, in 1975. He holds the title of Doctor of Sacred
   letters (honoris causa), Trinity College (1987).</p>
```

```
<p>Mr. Godfrey taught in the Department of History of Dalhousie
  University, Halifax, first as Assistant Professor
  (1970-1975), and then as Associate Professor (1980-1987). At
 <corpname>King's College University, Halifax</corpname>
  he held the position of Assistant Professor (1975-1976),
  before becoming President and Vice-Chancellor
  (1977-1987).</p>
</bioghist>
```

Content model

```
<content>
</content>
```

Schema Declaration element p { att.EADGlobal.attributes, (text | model.para.content)* }

<persname>

<persname> (Personal Name) The proper noun designation for an individual, including any or all of that individual's forenames, surnames, honorific titles, and added names.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*) att.roled (*@role*)

Member of model.access

Contained by EAD: bibref controlaccess entry event extrefloc indexentry item label namegrp origination p physdesc physfacet ref refloc unittitle

May contain EAD: emph extptr lb ptr

Note All names in a finding aid do not have to be tagged. One option is to tag those names for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary forms is recommended to facilitate access to names within and across finding aid systems. The <persname> element may be used in text elements such as <p>. To indicate a personal name with major representation in the materials being described, nest <persname> within the <controlaccess> element.The ROLE attribute can be used to specify the relationship(s) of the name to the materials being described, for example, "compiler," "creator," "collector," or "subject." The NORMAL attribute can be used to provide the authority form of a name that has been encoded with <persname> in narrative text, e.g., within a paragraph. Use the SOURCE attribute to specify the vocabulary from which the name has been taken. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the name or cross references for alternative forms of the name and related names. The RULES attribute can be used to specify the descriptive rules followed when forming the name, such as AACR2R.
See also related elements <controlaccess>, <corpname>, <famname>, and <name>.
The <persname> element is comparable to MARC fields 100, 600, and 700.

Example

```
<scopecontent xmlns="urn:isbn:1-931666-22-9">
 <head>Scope and Content Note</head>
 <p>The papers of university professor and economist Mark Perlman
   span the dates 1952-1994, with most of the papers being
   dated between 1967 and 1989. The papers consist chiefly of
   professional correspondence to and from Perlman, indexes to
   these letters and a small number of subject files, but
```

include none of his personal papers. The collection documents Perlman's career as an economist and author at
<corpname normal="Cornell University">Cornell,</corpname>
<corpname normal="Johns Hopkins University">Johns Hopkins,</corpname> and the <corpname>University of Pittsburgh</corpname> and reflects his interest in work arbitration, trade unions, and the economics of public health. Among correspondents are many noted economists, including <persname normal="Abramovitz, Moses">Moses Abramovitz, </persname>
<persname normal="Shubik, Martin"> Martin Shubik, </persname>and
<persname normal="Bronfenbrenner, Martin"> Martin Bronfenbrenner. </persname> While many of the letters are personal in nature, others contain considerable information about Perlman's work, particularly in the years around the publication of his works <title render="italic">Judges in Industry: A Study of Labor Arbitration in Australia</title>
<date type="publication">(1954)</date> and <title render="italic">Spatial, Regional, and Population Economics: Essays in Honor of Edgar M. Hoover</title>
<date type="publication">(1972).</date> Additional correspondence relates to the publication of the <title render="italic">Journal of Economic Literature.</title>
</p>
</scopecontent>

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Subjects:</head>
 <persname encodinganalog="600$a"
  source="lcnaf">Reimann, Lewis
  Charles, 1909-1978.</persname>
 <persname encodinganalog="600$a"
  source="lcnaf">Evans,
   Thomas.</persname>
 <persname encodinganalog="600$a"
  source="lcnaf">Trippe, Matthew
   J., 1915-1967.</persname>
 <persname encodinganalog="600$a"
  source="lcnaf">Elliot,
   Raymond.</persname>
</controlaccess>
```

Schematron

In the access points, Person names SHOULD be structured like this : Family name, given name

```
<s:rule context="ead:controlaccess/ead:persname"> <s:assert role="SHOULD"
 test="[0-9a-zA-Z]+(,[0-9a-zA-Z]+)*"">In the access points, Person names SHOULD be structured like this : Family name, given name</s:assert> </s:rule>
```

Content model

```
<content/>
```

Schema Declaration

element persname

```
{
  att.EADGlobal.attributes,
  att.access.attributes,
  att.roled.attributes,
  ( text | model.phrase.bare )*
}
```

<physdesc>

<physdesc> (Physical Description) A wrapper element for bundling information about the appearance or construction of the described materials, such as their dimensions, a count of their quantity or statement about the space they occupy, and terms describing their genre, form, or function, as well as any other aspects of their appearance, such as color, substance, style, and technique or method of creation. The information may be presented as plain text, or it may be divided into the <dimension>, <extent>, <genreform>, and <physfacet> subelements.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*) att.access (authfilenumber, normal, @source, @rules)
Member of	model.did
Contained by	EAD: archref did
May contain	EAD: abbr archref bibref corpname date dimensions emph expan extent extptr extref famname function genreform geogname lb linkgrp name occupation persname physfacet ptr ref subject subtitle title
Note	The <physdesc> element is comparable to ISAD(G) data element 3.1.5 and MARC field 300.

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9" level="series">
 <did>
  <unittitle>Seizure Records, </unittitle>
  <unitdate>December 1908-January 1928.</unitdate>
  <physdesc>4 volumes and 1 folder.</physdesc>
 </did>
</c01>
```

Example

```
<c xmlns="urn:isbn:1-931666-22-9" level="subseries">
 <did>
  <unittitle>Documentary Movies, </unittitle>
  <unitdate type="inclusive">1952-1964</unitdate>
  <physdesc>
   <extent>2.5 linear ft.</extent>
  </physdesc>
 </did>
</c>
```

Schematron	In the <did> element, <physdesc> SHOULD come with a non-empty <extent> <s:rule context="ead:physdesc"> <s:assert role="SHOULD" test="normalize-space(ead:extent[1])">a did SHOULD have a non-empty physdesc-extent, according to 17.3</s:assert> </s:rule>

Content model

```
<content/>
```

Schema Declaration

```
element physdesc
{
  att.EADGlobal.attributes,
```

```
  att.labeled.attributes,
  att.access.attribute.source,
  att.access.attribute.rules,
  (
    text
   | model.phrase.basic
   | dimensions
   | physfacet
   | extent
   | date
   | model.access
  )*
}
```

<physfacet>

<physfacet> (Physical Facet) A <physdesc> subelement for information about an aspect of the appearance of the described materials, such as their color, style, marks, substances, materials, or techniques and methods of creation.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*) att.typed (*@type*) att.access (authfilenumber, normal, @source, @rules) unit **Status** Optional **Datatype**
Contained by	EAD: physdesc
May contain	EAD: abbr archref bibref corpname date emph expan extptr extref famname function genreform geogname lb linkgrp name occupation persname ptr ref subject subtitle title
Note	It is used especially to note aspects of appearance that affect or limit use of the materials. It generally should not be used for aspects of physical description that are covered more directly by the <extent>, <dimensions>, and <genreform> elements, although use of <genreform> may be appropriate for further specification within some <physfacet> instances.The TYPE attribute may be used to specify which aspect of the physical appearance is being designated, e.g., *<physfacet type="color">*red*</physfacet>*
Example	<physdesc xmlns="urn:isbn:1-931666-22-9"> <extent>3 </extent> <genreform>daguerreotypes, </genreform> <physfacet>hand colored</physfacet> </physdesc>
Example	<physdesc xmlns="urn:isbn:1-931666-22-9"> <physfacet type="material">Paper</physfacet> <physfacet type="ruling">Ruled in red ink</physfacet> <physfacet type="watermarks">Briquet 1234</physfacet> <physfacet type="binding">Bound in 19th century red leather</physfacet> </physdesc>
Content model	<content> </content>

Schema

Declaration

```
element physfacet
{
  att.EADGlobal.attributes,
  att.labeled.attributes,
  att.typed.attributes,
  att.access.attribute.source,
  att.access.attribute.rules,
  attribute unit { text }?,
  ( text | model.phrase.basic | model.access | date )*
}
```

<physloc>

<physloc> (Physical Location) Information identifying the place where the described materials are stored, such as the name or number of the building, room, stack, shelf, or other tangible area.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*) att.typed (*@type*)

parent **Status** Optional **Datatype**

Member of model.did

Contained by EAD: archref did

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp ptr ref subtitle title

Note Do not confuse with <container>, which is used to identify the cartons, boxes, reels, folders, and other storage devices used to hold the described materials. Also do not confuse with <repository>, which is used to identify the institution or agency responsible for providing intellectual access to the described materials.Like all Descriptive Identification <did> subelements, the <physloc> element has a LABEL attribute which may be used to provide a readily understandable heading for the element's content. The TYPE attribute may also be used to identify the nature of the storage location. For security reasons, the AUDIENCE attribute value may be set to "internal" to shield public access to storage location information.
The <physloc> element is comparable to MARC field 852.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" type="inventory" level="subgrp">
 <did>
  <head>Overview of the Records</head>
  <repository label="Repository:">
   <corpname>Minnesota
      Historical Society </corpname>
  </repository>
  <origination label="Creator:">Minnesota. Game and Fish
    Department</origination>
  <unittitle label="Title:">Game laws violation records, </unittitle>
  <unitdate label="Dates:">1908-1928</unitdate>
  <abstract label="Abstract:">Records of prosecutions for and
    seizures of property resulting from violation of the
    state's hunting and fishing laws.</abstract>
  <physdesc label="Quantity:"> 2.25 cu. ft. (7 v. and 1 folder
    in 3 boxes) </physdesc>
  <physloc label="Location:"> See Detailed Description section
    for box location </physloc>
```

```
 </did>
</archdesc>
```

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <physloc>112.I.8.1B-2</physloc>
  <container type="box">2</container>
  <unittitle>
   <unitdate type="inclusive">December 1908-July
      1917 </unitdate>
  </unittitle>
 </did>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element physloc
{
   att.EADGlobal.attributes,
   att.labeled.attributes,
   att.typed.attributes,
   attribute parent { xsd:IDREFS }?,
   ( text | model.phrase.basic )*
}
```

<phystech>

<phystech> (Physical Characteristics and Technical Requirements) A description of important physical conditions or characteristics that affect the storage, preservation, or use of the materials described. This includes details of their physical composition or the need for particular hardware or software to preserve or access the materials.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp phystech

May contain EAD: address blockquote chronlist head list note p phystech table

Note The <phystech> element is comparable to ISAD(G) data element 3.4.4 and MARC fields 340 and 538.

Example

```
<c04 xmlns="urn:isbn:1-931666-22-9" level="item">
 <did>[...]</did>
 <phystech>
  <p>Some oxydization of the aluminum layer.</p>
 </phystech>
</c04>
```

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="subseries">
 <did>[...]</did>
 <phystech>
  <head>System Requirements</head>
  <p>48K RAM; Apple Disk II with controller; colour
```

```
    monitor</p>
 </phystech>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element phystech
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  head?,
  ( model.blocks | phystech )+
}
```

<prefercite>

<prefercite> (Preferred Citation) Information about how users should identify the described materials when referring to them in published credits. Generally the repository or agent responsible for providing intellectual access to the materials will supply users with a recommended wording or prescribed format for structuring references to the described materials in bibliographies, footnotes, screen credits, etc.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp prefercite

May contain EAD: address blockquote chronlist head list note p prefercite table

Note Do not confuse with <archref> or <bibref> which are used to cite and/or link to materials other than those described in the finding aid.In EAD Version 1.0 <prefercite> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.
The <prefercite> element is comparable to MARC field 524.

Example

```
<prefercite xmlns="urn:isbn:1-931666-22-9">
 <head>Preferred Citation</head>
 <p>[Identification of item], Arequipa Sanatorium Records, BANC
   MSS 92/894c, The Bancroft Library, University of California,
   Berkeley.</p>
</prefercite>
```

Example

```
<prefercite xmlns="urn:isbn:1-931666-22-9">
 <p>item, folder title, box number, Charles Thomas, Jr. Papers,
   Bentley Historical Library, University of Michigan.</p>
</prefercite>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element prefercite
{
  att.EADGlobal.attributes,
  head?,
  ( model.blocks | prefercite )+
}
```

<processinfo>

<processinfo> (Processing Information) Information about accessioning, arranging, describing, preserving, storing, or otherwise preparing the described materials for research use. Specific aspects of each of these activities may be encoded separately within other elements, such as <acqinfo>, <arrangement>, <physloc>, etc.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp processinfo

May contain EAD: address blockquote chronlist head list note p processinfo table

Note In EAD Version 1.0 <processinfo> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002.The <processinfo> element is comparable to ISAD(G) data element 3.7.1 and MARC field 583. A <date> within a <processinfo><p> element is comparable to ISAD(G) data element 3.7.3.

Example

```
<processinfo xmlns="urn:isbn:1-931666-22-9">
 <head>Processing Information:</head>
 <p>These records were organized and cataloged in
 <date>1977</date> by Lydia Lucas.</p>
</processinfo>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element processinfo
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  head?,
  ( model.blocks | processinfo )+
}
```

<profiledesc>

<profiledesc> (Profile Description) An optional subelement of the <eadheader> that bundles information about the creation of the encoded version of the finding aid, including the name of the agent, place, and date of encoding. The <profiledesc> element also designates the predominant and minor languages used in the finding aid.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: eadheader
May contain	EAD: creation descrules langusage
Note	Do not confuse with <filedesc>, which bundles such bibliographic information as the title, author, publisher, edition, and publishing series of the finding aid.For newer finding aids, the author and encoder may be the same person or institution, but for most older finding aids, someone other than the author will be converting and encoding the document. The encoder should be listed in the <creation> subelement of <profiledesc>, while the author should be identified in the <titlestmt> subelement of <filedesc>. Within <profiledesc> the Descriptive Rules <descrules> element can be used to specify the descriptive code or guidelines followed in creating the finding aid.
Example	<eadheader xmlns="urn:isbn:1-931666-22-9" audience="internal" langencoding="iso639-2b"> <eadid>[...]</eadid> <filedesc>[...]</filedesc> <profiledesc> <creation>Machine-readable finding aid and skeletal markup derived via a macro from WordPerfect file; markup checked and completed by Sarah Taylor. <date normal="19950423">April 23, 1995.</date> </creation> <langusage> Finding aid written in <language langcode="eng">English.</language> </langusage> <descrules>Finding aid prepared using <title render="italic">Rules for Archival Description</title> </descrules> </profiledesc> </eadheader>
Schematron	<eadheader> MUST contain information on the language used in the EAD document: <langusage> <language> element <s:rule context="ead:profiledesc"> <s:assert role="MUST" test="ead:langusage/ead:language">eadheader MUST contain a langusage/language element</s:assert> </s:rule>
Schematron	<eadheader> SHOULD contain a <creation> element <s:rule context="ead:profiledesc"> <s:assert role="SHOULD" test="ead:creation">eadheader SHOULD contain a creation element</s:assert> </s:rule>
Schematron	<descrules> has a default value added automatically by EHRI. Therefore, the content of <descrules> will be overwritten <s:rule context="ead:profiledesc" role="SHOULD"> <s:assert test="not(normalize-space(ead:descrules))">descrules has a default value added automatically by EHRI. Therefore, the content of descrules will be overwritten</s:assert> </s:rule>

Content model

<content/>

Schema Declaration

element profiledesc
{
att.EADGlobal.attributes,
(creation?, langusage?, descrules?)
}

<ptr/>

<ptr/> (Pointer) An empty internal linking element that uses attributes to provide for movement from one place in a finding aid to another place in the same finding aid. Unlike the <ref> element, the <ptr/> element cannot contain text and subelements to describe the referenced object.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.phrase.bare

Contained by EAD: abstract addressline archref author bibref bibseries container corpname creation date descrules dimensions edition emph entry event extrefloc famname function genreform geogname head head01 head02 imprint indexentry item label langmaterial language langusage legalstatus materialspec name num occupation origination p persname physdesc physfacet physloc ptrgrp publisher ref refloc repository runner sponsor subarea subject subtitle title titleproper unitdate unitid unittitle

May contain Empty element

Note Do not confuse with <extptr/> which is used to connect the EAD document to an external electronic object, which is not part of the described materials.See related linking elements <extptr/>, <extptrloc/>, <extref>, <extrefloc>, <linkgrp>, <ptrgrp>, <ptrloc/>, <ref>, and <refloc>.
While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<appraisal xmlns="urn:isbn:1-931666-22-9">
 <p> This collection was re-appraised by repository staff in 1992
   in order to facilitate use by weeding the collection of
   materials no longed deemed as having evidential or
   informational value. A list of materials removed from the
   collection after the re-appraisal is provided at the end of
   this guide. <ptr linktype="simple"
   actuate="onrequest" show="replace" target="mss1982-062_add2"/>
 </p>
</appraisal>
```

Content model

<content>
</content>

Schema

Declaration element ptr { att.EADGlobal.attributes, att.xlink.attributes, empty }

<ptrgrp>

<ptrgrp> (Pointer Group) A wrapper element for two or more Pointer <ptr/> or Reference <ref> elements used in an <indexentry>. Pointers and references are internal links that provide for movement from one place in the finding aid to another place in the same finding aid. When encoding an index in EAD, a name or entry is generally listed only once, followed by a <ptrgrp> containing the series of pointers and references that link the name or entry to the places in the finding aid where it appears. The <ptrgrp> prevents the name or entry from having to appear multiple times in the index.

Module EAD
Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*)
Contained by EAD: indexentry
May contain EAD: ptr ref
Example

```
<index xmlns="urn:isbn:1-931666-22-9">
 <head>Correspondent Index</head>
 <indexentry>
  <persname>Adeltraud, Jerome</persname>
  <ptrgrp>
   <ref linktype="simple"
    target="corresp19730824" actuate="onrequest" show="replace">
    <date normal="19730824">1973 August 24</date>
   </ref>
   <ref linktype="simple"
    target="corresp19740228" actuate="onrequest" show="replace">
    <date normal="19740228">1974 February 28</date>
   </ref>
   <ref linktype="simple"
    target="corresp19750315" actuate="onrequest" show="replace">
    <date normal="19750315">1975 March 15</date>
   </ref>
  </ptrgrp>
 </indexentry> . . . </index>
```

Content model

```
<content>
</content>
```

Schema Declaration element ptrgrp { att.EADGlobal.attributes, (ptr | ref)+ }

<ptrloc/>

<ptrloc/> (Pointer Location) The location of a pointer <ptr/> that is a resource in an extended link.

Module EAD
Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*)
Member of model.extended.els
Contained by EAD: daogrp linkgrp
May contain Empty element
Note While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use

	XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.
Content model	
	<content> </content>
Schema Declaration	element ptrloc { att.EADGlobal.attributes, empty }

<publicationstmt>

<publicationstmt> (Publication Statement) A wrapper element within the <filedesc> portion of <eadheader> for information concerning the publication or distribution of the encoded finding aid, including the publisher's name and address, the date of publication, and other relevant details.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by	EAD: filedesc
May contain	EAD: address date num p publisher
Note	The <publicationstmt> may contain just text, laid out in Paragraphs <p>, or it may include the <publisher>, <address>, <date>, and <num> elements, which allow for more specific tagging of a publisher's name and address, the date of publication, and the number, if any, assigned to the published finding aid.
Example	<filedesc xmlns="urn:isbn:1-931666-22-9"> <titlestmt>[...]</titlestmt> <publicationstmt> <date>1995</date> <publisher>Prints & Photographs Division<lb/>Library of Congress</publisher> <address> <addressline>Washington, D.C. 20540</addressline> </address> </publicationstmt> </filedesc>
Schematron	<eadheader> SHOULD specify a <publisher> <s:rule context="ead:publicationstmt"> <s:assert role="SHOULD" test="ead:publisher">eadheader SHOULD specify a publisher</s:assert> </s:rule>
Content model	
	<content/>

Schema Declaration	element publicationstmt
	{
	att.EADGlobal.attributes,
	(publisher | date | address | num | p)+
	}

<publisher>

<publisher> (Publisher) When used in the <publicationstmt> portion of <eadheader> and in the <titlepage> element in <frontmatter>, the <publisher> is the name of the party responsible for issuing or distributing the encoded finding aid. Often this party is the same corporate body

identified in the <repository> element in the finding aid. When used in the <imprint> section of a Bibliographic Reference <bibref>, the <publisher> is the name of the party issuing a monograph or other bibliographic work cited in the finding aid.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: imprint publicationstmt titlepage
May contain EAD: emph extptr lb ptr
Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>[...]</titlestmt>
 <publicationstmt>
  <date>1995</date>
  <publisher>Prints &amp;amp; Photographs Division<lb/>Library of
    Congress</publisher>
  <address>
   <addressline>Washington, D.C.
     20540</addressline>
  </address>
 </publicationstmt>
</filedesc>
```

Example

```
<bibliography xmlns="urn:isbn:1-931666-22-9">
 <bibref>
  <persname role="author">Kinder, Dolores.</persname>
  <title>Once Upon a Lullaby.</title>
  <imprint>
   <geogname>New York: </geogname>
   <publisher>Wells &amp;amp; Sons, </publisher>
   <date type="publication">1931</date>
  </imprint>
 </bibref>
</bibliography>
```

Content model

```
<content>
</content>
```

Schema Declaration element publisher { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<ref>

<ref> (Reference) An internal linking element that provides for movement from one place in a finding aid to another place in the same finding aid. Unlike the internal Pointer <ptr/> element, the <ref> element may contain text and subelements that identify or describe the referenced object. The <ref> element may be used in a variety of ways in an encoded finding aid. For example, a <ref> may provide a dynamic link from one Component <c> to another related Component <c> in the same way that See and See also references direct readers of paper-based finding aids. Or, a <ref> might be used to direct the reader from text in a scope and content note to a description of a Component <c> in a contents list.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)
Member of model.refs

Contained by	EAD: abstract archref bibliography bibref creation descrules dimensions emph entry event extref indexentry item label langmaterial langusage materialspec origination otherfindaid p physdesc physfacet physloc ptrgrp relatedmaterial repository separatedmaterial unitdate unitid unittitle
May contain	EAD: abbr address archref bibref blockquote chronlist corpname date emph expan extptr extref famname function genreform geogname lb list name note num occupation origination persname ptr repository subject table title unitdate unittitle
Note	While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.
Example	<index xmlns="urn:isbn:1-931666-22-9"> <head>Index to Correspondents and Recipients</head> <indexentry> <corpname>Bach & Bros.</corpname> <ref linktype="simple" target="NonC:21-2" show="replace" actuate="onrequest"> (In non correspondence)</ref> </indexentry> <indexentry> <namegrp> <corpname>Bacon and Lewis, Ltd.</corpname> <persname>Levering, Alexander M.</persname> <persname>Windom, Lucious</persname> </namegrp> <ref linktype="simple" target="Cres:18610408" show="replace" actuate="onrequest"> (1861 Apr. 8, ALS, to W.W., re: inquiry into what to do with unsold flour)</ref> </indexentry> . . . </index>
Content model	<content> </content>

Schema Declaration	element ref
	{
	att.EADGlobal.attributes,
	att.xlink.attributes,
	(text | model.para.content.norefs | bibref | title | extref | archref)*
	}

<refloc>

<refloc> (Reference Location) A linking element that provides the location of a reference <ref> that is a resource in an extended link.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.roled (*@role*)
Member of	model.extended.els
Contained by	EAD: daogrp linkgrp
May contain	EAD: abbr address blockquote chronlist corpname date emph expan extptr famname function genreform geogname lb list name note num occupation

origination persname ptr repository subject table unitdate unittitle

Note

While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink/.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>[...]</did>
 <arrangement>
  <p>This collection is organized into two major sections. The
     Original Gift portion reflects the materials originally
     donated to the Society by Mr. Provenance, while the
     Additions portion contains records transferred following
     his death. As these two groups of documents have not
     been physically interfiled, materials on any given topic
     may appear in either or both sections, each of which is
     divided into four parallel series. <linkgrp>
    <refloc target="a9"/>
    <refloc target="s1"/>
    <refloc target="s7"/>
   </linkgrp>
  </p>
  <p id="a9">Personal Correspondence></p>
  <p id="a10">Financial Records</p>
  <p id="a11">Diaries</p>
  <p id="a12">Literary Manuscripts</p>
 </arrangement>
 <dsc type="combined">
  <head>Original Gift</head>
  <c01 id="s1">
   <did>
    <unittitle>Personal correspondence, </unittitle>
    <unitdate>1917-1965.</unitdate>
   </did>
  </c01> . . . </dsc>
 <dsc type="combined">
  <head>Additions</head>
  <c01 id="s7">
   <did>
    <unittitle>Personal correspondence, </unittitle>
    <unitdate>1922-1945.</unitdate>
   </did>
  </c01> . . . </dsc>
</archdesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element refloc
{
   att.EADGlobal.attributes,
```

```
    att.roled.attributes,
    ( text | model.para.content.norefs )*
}
```

<relatedmaterial>

<relatedmaterial> (Related Material) Information about materials that are not physically or logically included in the material described in the finding aid but that may be of use to a reader because of an association to the described materials. Materials designated by this element are not related to the described material by provenance, accumulation, or use.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp relatedmaterial
May contain	EAD: address archref bibref blockquote chronlist extref head linkgrp list note p ref relatedmaterial subtitle table title
Note	Do not confuse <relatedmaterial> with the element <separatedmaterial>, which provides information about materials that have been separated or physically removed from the described materials but that are related to them by provenance. Also do not confuse with <altformavail>, which encodes information about copies of the described materials, such as microforms, photocopies, and reproductions in digital formats. Do not confuse with <originalsloc>, which encodes information regarding the existence and location of the originals when the unit being described consists of copies.In EAD Version 1.0 <relatedmaterial> was a subelement of Adjunct Descriptive data <add>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <add> when converting finding aids encoded in EAD V1.0 to EAD 2002. The <relatedmaterial> element is comparable to ISAD(G) data element 3.5.3 and MARC field 544 with indicator 1.
Example	<relatedmaterial xmlns="urn:isbn:1-931666-22-9"> <head>Related Correspondence</head> Researchers should note that a significant amount of the correspondence between Franklin Wigglethorpe and Nellie Forbush is extant. In addition to the incoming letters in this collection from Mr. Wigglethorpe to Miss Forbush, the letters written to Mr. Wigglethorpe by Miss Forbush are available to researchers at the Mainline University Special Collections Library. <archref> <origination> <persname>Wigglethorpe, Franklin.</persname> </origination> <unittitle>Franklin Wigglethorpe Papers, <unitdate type="inclusive">1782-1809.</unitdate> </unittitle> <unitid>MSS 00143</unitid>

```
 </archref>
 <p>An online guide to the Wigglethorpe Papers is available.
 <extptr actuate="onrequest"
   entityref="mu-scl-00143" show="new"/>
 </p>
</relatedmaterial>
```

Example

```
<separatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>Photographs and sound recordings have been transferred to the
   appropriate custodial divisions of the Library where they
   are identified as part of these papers. Among the sound
   recordings are the following broadcasts:</p>
 <list>[...]</list>
</separatedmaterial>
<separatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>Other papers of Earl Warren, which relate chiefly to his
   early years and public service in California, are held by
   the California State Archives in Sacramento.</p>
</separatedmaterial>
<relatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>Records relating to the Warren Commission are held in the
   National Archives and Records Administration.</p>
</relatedmaterial>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element relatedmaterial
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   head?,
   ( model.blocks | model.refs | relatedmaterial )+
}
```

<repository>

<repository> (Repository) The institution or agency responsible for providing intellectual access to the materials being described. The <corpname> element may be used within <repository> to encode the institution's proper name.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.labeled (*@label*)
Member of	model.data model.did
Contained by	EAD: archref did entry event extrefloc item label p ref refloc
May contain	EAD: abbr address archref bibref corpname emph expan extptr extref lb linkgrp name ptr ref subarea subtitle title
Note	Although the repository providing intellectual access usually also has physical custody over the materials, this is not always the case. For example, an archives may assume responsibility for long-term intellectual access to electronic records, but the actual electronic data files or systems may continue to reside in the office where they were created and maintained, or they may be held for long-term

storage by a unit such as a data library that is able to provide the appropriate technical facilities for storage and remounting. When it is clear that the physical custodian does not provide intellectual access, use <physloc> to identify the custodian and <repository> to designate the intellectual caretaker. When a distinction cannot be made, assume that the custodian of the physical objects also provides intellectual access to them and should be recognized as the <repository>.The <repository> element is comparable to MARC field 852.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" type="inventory" level="subgrp">
 <did>
  <head>Overview of the Records</head>
  <repository label="Repository:">
   <corpname>Minnesota Historical Society</corpname>
  </repository>
  <origination label="Creator:">Minnesota. Game and Fish
     Department</origination>
  <unittitle label="Title:">Game laws violation records, </unittitle>
  <unitdate label="Dates:">1908-1928</unitdate>
  <abstract label="Abstract:">Records of prosecutions for and
     seizures of property resulting from violation of the
     state's hunting and fishing laws. </abstract>
  <physdesc label="Quantity:">2.25 cu. ft. (7 v. and 1 folder
     in 3 boxes) </physdesc>
  <physloc label="Location:">See Detailed Description section
     for box location</physloc>
 </did>
</archdesc>
```

Example

Note: The Public Record Office of the United Kingdom uses a 7 level system of intellectual units devised specifically for that repository. In that system "lettercode" is the equivalent of "fonds" and "class" is the equivalent of "series."

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="otherlevel"
 otherlevel="Lettercode">
 <did>
  <unitid>EW</unitid>
  <unittitle>Records of the Department of Economic
     Affairs</unittitle>
  <origination>
   <corpname>Department of Economic
      Affairs</corpname>
  </origination>
  <unitdate>1945-1979</unitdate>
  <physdesc>
   <extent>28 </extent>
   <genreform>classes</genreform>
  </physdesc>
  <repository>Public Record Office, Kew</repository>
 </did>
</archdesc>
```

Content model

```
<content>
</content>
```

Schema

Declaration element repository
{
att.EADGlobal.attributes,
att.labeled.attributes,
(text | model.phrase.basic | address | corpname | name | subarea)*
}

<resource>

<resource> (Resource) A linking element that specifies the local resource that participates in an extended link.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*)

Member of model.extended.els

Contained by EAD: daogrp linkgrp

May contain EAD: emph lb

Note While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<c02 xmlns="urn:isbn:1-931666-22-9" level="file">
 <did>
  <unittitle>Photographs of John Smith and family
     members</unittitle>
  <unitdate type="inclusive"
   normal="1895/1928">1895-1928</unitdate>
  <daogrp linktype="extended">
   <daodesc>
    <p>Sample digitized image from this file: John Smith
        graduation portrait, <date normal="18950528">28
          May 1895</date>.</p>
   </daodesc>
   <resource linktype="resource"
    label="start"/>
   <daoloc entityref="f0042_1tmb"
    linktype="locator" label="thumb"/>
   <daoloc entityref="f0042_1ref"
    linktype="locator" label="reference"/>
   <arc linktype="arc" show="embed"
    actuate="onload" from="start" to="thumb"/>
   <arc linktype="arc" show="new"
    actuate="onrequest" from="thumb" to="reference"/>
  </daogrp>
 </did>
</c02>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element resource
{
  att.EADGlobal.attributes,
  att.xlink.attributes,
  ( text | model.render )*
}
```

<revisiondesc>

<revisiondesc> (Revision Description) An optional subelement of the <eadheader> for information about changes or alterations that have been made to the encoded finding aid. The revisions may be recorded as part of a <list> or as a series of <change> elements. Like much of the <eadheader>, the <revisiondesc> element is modeled on an element found in the Text Encoding Initiative (TEI) DTD. The TEI recommends that revisions be numbered and appear in reverse chronological order, with the most recent <change> first.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: eadheader

May contain EAD: change list

Example

```
<eadheader xmlns="urn:isbn:1-931666-22-9" audience="internal"
 langencoding="iso639-2b">
 <eadid>[...]</eadid>
 <filedesc>[...]</filedesc>
 <profiledesc>[...]</profiledesc>
 <revisiondesc>
  <change>
   <date normal="19970505">May 5, 1997</date>
   <item>This electronic finding aid was updated to current
      markup standards by Sarah Taylor using a perl
      script. Updates included: eadheader, eadid,
      arrangement of did elements and their labels.</item>
  </change>
 </revisiondesc>
</eadheader>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element revisiondesc { att.EADGlobal.attributes, ( list | change+ ) }
```

<row>

<row> (Table Row) A formatting element that contains one or more <entry> elements (horizontal cells) in a table.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

rowsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**

			0
	valign	**Status**	Optional
		Datatype	
		Legal values are:	**top**
			middle
			bottom

Contained by EAD: tbody thead
May contain EAD: entry
Note By convention, a rule specified by the ROWSEP attribute prints or displays below the row. Vertical rules are specified by the COLSEP attribute in <table> or one of its column-related subelements; external rules are specified by the FRAME attribute available on the <table> element.See also related elements <table>, <tbody>, <tgroup>, and <thead>.
Example

```
<table xmlns="urn:isbn:1-931666-22-9" frame="none">
 <tgroup cols="3">
  <colspec colnum="1" colname="1"
   align="left" colwidth="50pt"/>
  <colspec colnum="2" colname="2"
   align="left" colwidth="50pt"/>
  <colspec colnum="3" colname="3"
   align="left" colwidth="50pt"/>
  <thead>
   <row>
    <entry colname="1">Major Family Members</entry>
    <entry colname="2">Spouses</entry>
    <entry colname="3">Children</entry>
   </row>
  </thead>
  <tbody>
   <row>
    <entry colname="1">John Albemarle
        (1760-1806)</entry>
    <entry colname="2">Mary Frances Delaney
        (1769-1835)</entry>
    <entry colname="3">John Delaney Albemarle
        (1787-1848)</entry>
   </row> . . . </tbody>
 </tgroup>
</table>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element row
{
   att.EADGlobal.attributes,
   attribute rowsep { "1" | "0" }?,
```

```
    attribute valign { "top" | "middle" | "bottom" }?,
    entry+
}
```

<runner>

<runner> (Runner) An optional formatting element that provides for a header, footer, or watermark to appear on every page of a printed finding aid or throughout an electronic version. If a transparent image is desired as background, use <extptr/> instead. The <runner> is available within <archdesc> and <archdescgrp> and must appear before the <did>. The PLACEMENT attribute specifies whether the <runner> should appear as a header, footer, or watermark.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.roled (*@role*) placement
Contained by	EAD: archdesc archdescgrp
May contain	EAD: emph extptr lb ptr
Example	<runner xmlns="urn:isbn:1-931666-22-9" placement="footer"> Special Collections, University of Virginia Library, #5866-b </runner>
Content model	<content> </content>
Schema Declaration	element runner { att.EADGlobal.attributes, att.roled.attributes, attribute placement { "header" | "footer" | "watermark" }?, (text | model.phrase.bare)* }

<scopecontent>

<scopecontent> (Scope and Content) A prose statement summarizing the range and topical coverage of the described materials, often mentioning the form and arrangement of the materials and naming significant organizations, individuals, events, places, and subjects represented. The purpose of the <scopecontent> element is to assist readers in evaluating the potential relevance of the materials to their research. It may highlight particular strengths of, or gaps in, the described materials and may summarize in narrative form some of the descriptive information entered in other parts of the finding aid.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp scopecontent
May contain	EAD: address arrangement blockquote chronlist dao daogrp head list note p scopecontent table
Note	Additional <scopecontent> elements may be nested inside one another when a complex collection of materials is being described and separate headings are desired. For example, when a collection is received and processed in installments, individual scope and content notes may be created for each installment. EAD permits these separate narrative descriptions to be encoded as

discrete <scopecontent> elements, but it also enables the encoder to gather the independent <scopecontent> notes within a single larger <scopecontent> reflective of the materials as a whole. Nested <scopecontent> elements might also occur when an institution encodes the first paragraph of a long scope and content note as a separate summary <scopecontent> with an *encodinganalog* attribute set to MARC field 520$a.The *scopecontent* element is comparable to ISAD(G) data element 3.3.1 and MARC field 520.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="fonds">
 <did>[...]</did>
 <scopecontent encodinganalog="520">
  <head>Scope and Content</head>
  <p>Fonds includes records relating to the Department of
     Plant Ecology's administration, teaching and research;
     extension work relating to the Saskatchewan Weed Survey;
     and correspondence with a variety of institutions and
     individuals. A series of minutes and correspondence
     relating to the Saskatchewan Committee on the Ecology
     and Preservation of Grasslands (established in 1935)
     documents the efforts to establish permanent reserves of
     significant grasslands in Saskatchewan.</p>
 </scopecontent>
</archdesc>
```

Example

```
<dsc xmlns="urn:isbn:1-931666-22-9" type="combined">
 <head>Detailed Description of the Collection</head>
 <c01 level="series">
  <did>
   <unittitle>Record of Prosecutions, </unittitle>
   <unitdate>1916-1927. </unitdate>
   <physdesc>3 volumes.</physdesc>
  </did>
  <scopecontent>
   <p>Information provided in each entry: date of report,
      name and address of person arrested, location where
      offense was committed, date of arrest, nature of
      offense, name of judge or justice, result of trial,
      amounts of fine and court costs, number of days
      served if jailed, name of warden, and occasional
      added remarks. Types of offenses included hunting or
      fishing out of season or in unauthorized places,
      exceeding catch or bag limits, taking undersized
      fish, illegal fishing practices such as gill-netting
      or dynamiting, illegal hunting practices such as
      night-lighting, killing non-game birds, fishing or
      hunting without a license, and hunting-related
      offenses against persons such as fraud and
      assault.</p>
  </scopecontent>
 </c01>
</dsc>
```

Example

```
<scopecontent xmlns="urn:isbn:1-931666-22-9">
 <p>Papers of the Lewis family, 19th-20th cent., mainly letters
   to: Elizabeth, Lady Lewis (1844-1931), with a few to her
```

husband Sir George Lewis, 1st Bart. (1833-1911); to one of their daughters, Katherine Elizabeth Lewis (d. 1961), with a few to their son Sir George Lewis, 2nd Bart. (1868-1927); and to their grand-daughter Elizabeth Lewis, later Wansbrough (d. 1995). Many of the letters are undated; some can be dated from the postmark on the envelope, but several letters were kept in the wrong envelopes; most of Paderewski's and Whistler's letters had become separated from their envelopes.</p>
</scopecontent>

Content model

<content>
</content>

Schema Declaration

element scopecontent
{
att.EADGlobal.attributes,
head?,
((model.blocks) | arrangement | scopecontent | dao | daogrp)+
}

<separatedmaterial>

<separatedmaterial> (Separated Material) Information about materials that are associated by provenance to the described materials but that have been physically separated or removed.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)

Member of model.desc.base

Contained by EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp separatedmaterial

May contain EAD: address archref bibref blockquote chronlist extref head linkgrp list note p ref separatedmaterial subtitle table title

Note Items may be separated for various reasons, including the dispersal of special formats to more appropriate custodial units; the outright destruction of duplicate or nonessential material; and the deliberate or unintentional scattering of fonds among different repositories. Do not confuse with <relatedmaterial>, which is used to encode descriptions of or references to materials that are not physically or logically included in the material described in the finding aid but that may be of use to a reader because of an association to the described materials. Items encoded as <relatedmaterial> are not related to the described material by provenance, accumulation, or use.In EAD Version 1.0 <separatedmaterial> was a subelement of Adjunct Descriptive Data <add>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp> element can be used to replace <add> when converting finding aids encoded in EAD V1.0 to EAD 2002.
The <separatedmaterial> element is comparable to ISAD(G) data element 3.5.3 and MARC field 544 with indicator 0.

Example <separatedmaterial xmlns="urn:isbn:1-931666-22-9">

```
<head>Materials Cataloged Separately</head>
<p>Photographs have been transferred to Pictorial Collections of
  The Bancroft Library.</p>
</separatedmaterial>
```

Example

```
<separatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>Photographs and sound recordings have been transferred to the
   appropriate custodial divisions of the Library where they
   are identified as part of these papers. Among the sound
   recordings are the following broadcasts:</p>
 <list>[...]</list>
</separatedmaterial>
<separatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>Other papers of Earl Warren, which relate chiefly to his
   early years and public service in California, are held by
   the California State Archives in Sacramento.</p>
</separatedmaterial>
<relatedmaterial xmlns="urn:isbn:1-931666-22-9">
 <p>Records relating to the Warren Commission are held in the
   National Archives and Records Administration.</p>
</relatedmaterial>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element separatedmaterial
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  head?,
  ( model.blocks | model.refs | separatedmaterial )+
}
```

<seriesstmt>

<seriesstmt> (Series Statement) A wrapper element within the <filedesc> portion of <eadheader> that groups information about the published monographic series, if any, to which an encoded finding aid belongs. The <seriesstmt> may contain just text, laid out in Paragraphs <p>, or it may include the <titleproper> and <num> elements, which allow for more specific tagging of names or numbers associated with the series.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: filedesc

May contain EAD: num p titleproper

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper>Inventory of the Alfred Harrison Joy Papers,
  <date>1910-1972</date>
  </titleproper>
  <author>Processed by Ronald S. Brashear; machine-readable
    finding aid created by Xiuzhi Zhou</author>
 </titlestmt>
```

```
 <publicationstmt>

<!--&amp;amp;hdr-huntm;-->
  <date>© 1998</date>
  <p>The Huntington Library. All rights reserved.</p>
 </publicationstmt>
 <seriesstmt>
  <p>Observatories of the Carnegie Institution of Washington
     Collection</p>
 </seriesstmt>
</filedesc>
```

Content model

```
<content>
</content>
```

Schema Declaration element seriesstmt { att.EADGlobal.attributes, (titleproper | num | p)+ }

<sponsor>

<sponsor> (Sponsor) Name(s) of institution(s) or individual(s) who endorsed, financed, or arranged the acquisition, appraisal, and processing of the described materials or the preparation and distribution of the finding aid. Because acknowledgment of such contributors often appears on title pages of finding aids, the <sponsor> element is available in both the optional <titlepage> element in <frontmatter> and in the required <titlestmt> portion of the <eadheader>. Do not confuse with <author>, which is used to denote the persons or institutions responsible for the intellectual content of the finding aid, or with <repository>, which is used to identify the institution or corporate body providing intellectual access to the described materials.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: titlepage titlestmt

May contain EAD: emph extptr lb ptr

Note The <sponsor> element is comparable to MARC field 536.

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper>Inventory of The Bruno Walter Papers, <date>ca.
      1887-1966</date>
  </titleproper>
  <author>Processed by Richard Koprowski, Fran Barulich, and
    Robert Kosovsky; machine-readable finding aid created by
    Robert Kosovsky</author>
  <sponsor>Encoding funded by the generous support of the
    Gladys Krieble Delmas Foundation.</sponsor>
 </titlestmt> . . . </filedesc>
```

Content model

```
<content>
</content>
```

Schema Declaration element sponsor { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<subarea>

<subarea> (Subordinate Area) A name or phrase that indicates a secondary or subsidiary administrative level within a repository or other corporate body; a specialized area of subject or other collecting emphasis within a larger unit; or an ancillary collecting area based on the physical form of the materials.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)
Contained by EAD: corpname repository
May contain EAD: emph extptr lb ptr
Note This information may be included as plain text within the <repository> and <corpname> elements, or it may be encoded within <repository> and <corpname> as separately tagged <subarea> elements. The latter approach facilitates the filtering of finding aids by administrative division, department, or specialty. For <corpname>s other than <repository>, the <subarea> might help refine searches of large corporate entities, such as government agencies, which share common words, e.g., United States.
Example

```
<did xmlns="urn:isbn:1-931666-22-9">
 <repository>
  <corpname>Library of Congress, <subarea>Manuscript
      Division</subarea>
  </corpname>
 </repository>
</did>
```

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Index Terms</head>
 <corpname>National Association for the Advancement of Colored
   People <subarea>Washington Bureau</subarea>
 </corpname>
</controlaccess>
```

Content model

```
<content>
</content>
```

Schema Declaration element subarea { att.EADGlobal.attributes, (text | model.phrase.bare)* }

<subject>

<subject> (Subject) A term that identifies a topic associated with or covered by the described materials. Personal, corporate, and geographic names behaving as subjects are tagged as <persname>, <corpname>, and <geogname>, respectively. The ROLE attribute can be set to "subject" when it is necessary to specify the relationship of the name to the materials being described.

Module EAD
Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*)
Member of model.access
Contained by EAD: controlaccess entry event extrefloc indexentry item label namegrp p physdesc physfacet ref refloc unittitle
May contain EAD: emph extptr lb ptr
Note All subjects mentioned in a finding aid do not have to be tagged. One option is to

tag those subjects for which access other than basic, undifferentiated keyword retrieval is desired. Use of controlled vocabulary forms is recommended to facilitate access to the subjects within and across finding aid systems. The <subject> element may be used in text elements such as <p>. To indicate a subject with major representation in the materials being described, nest <subject> within the <controlaccess> element.Use the SOURCE attribute to specify the vocabulary from which the term has been taken. The NORMAL attribute can be used to provide the authority form of a term that has been encoded with <subject> in narrative text, e.g., within a paragraph. The RULES attribute can be used to specify the descriptive rules followed when formulating the term. The AUTHFILENUMBER attribute can be used to identify a link to an authority file record that has more information about the subject or cross references for alternative forms of a subject term.
The <subject> element is comparable to MARC fields 650 and 69x.

Example

```
<controlaccess xmlns="urn:isbn:1-931666-22-9">
 <head>Selected Search Terms</head>
 <controlaccess>
  <head>Subjects:</head>
  <subject encodinganalog="650">Alien and Sedition laws,
    1798</subject>
  <subject encodinganalog="650">American Confederate voluntary
    exiles</subject>
  <subject encodinganalog="650">Kentucky and Virginia
    resolutions of 1798</subject>
 </controlaccess>
</controlaccess>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element subject
{
  att.EADGlobal.attributes,
  att.access.attributes,
  ( text | model.phrase.bare )*
}
```

<subtitle>

<subtitle> (Subitle) A secondary or subsidiary name of an encoded finding aid that is subordinate to the main name encoded in <titleproper>. The <subtitle> element is available only within <titlepage> and <titlestmt> to capture bibliographic aspects of the finding aid. Subtitles of monographs, serials, paintings, and other such works mentioned in the finding aid are not separately encoded, but they may be listed as part of the <title> element.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Member of model.access.title model.refs

Contained by EAD: abstract bibliography controlaccess creation descrules dimensions emph entry event indexentry item label langmaterial langusage materialspec namegrp origination otherfindaid p physdesc physfacet physloc relatedmaterial repository separatedmaterial titlepage titlestmt unitdate unitid unittitle

May contain EAD: abbr date emph expan extptr lb num ptr

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper>Tom Stoppard</titleproper>
  <subtitle>An Inventory of His Papers at the Harry Ransom
    Humanities Research Center</subtitle>
  <author>Finding aid written by Katherine Mosley</author>
 </titlestmt>
 <publicationstmt>
  <publisher>The University of Texas at Austin, Harry Ransom
    Humanities Research Center</publisher>
  <date>2000</date>
 </publicationstmt>
</filedesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element subtitle
{
   att.EADGlobal.attributes,
   ( text | model.phrase.bare | abbr | date | expan | num )*
}
```

<table>

<table> (Table) A wrapper element for formatting information in a row and column display.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

frame	**Status**	Optional
	Datatype	
	Legal values are:	**top**
		bottom
		topbot
		all
		sides
		none
colsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**
		0
rowsep	**Status**	Optional
	Datatype	

		Legal values are:	**1**
			0
	pgwide	**Status**	Optional
		Datatype	
		Legal values are:	**1**
			0

Member of model.inter.noquote

Contained by EAD: accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist blockquote controlaccess custodhist daodesc descgrp div dsc dscgroup event extrefloc index item note odd originalsloc otherfindaid p phystech prefercite processinfo ref refloc relatedmaterial scopecontent separatedmaterial userestrict

May contain EAD: head tgroup

Note The application of the <table> element is based on the XML Exchange Table Model, an XML expression of the Exchange subset of the full CALS table model DTD. This model is promulgated by the Organization for the Advancement of Structured Information Standards (OASIS) to promote interoperability among vendor products.

Example

```
<table xmlns="urn:isbn:1-931666-22-9" frame="none">
 <tgroup cols="3">
  <colspec colnum="1" colname="1"
   align="left" colwidth="50pt"/>
  <colspec colnum="2" colname="2"
   align="left" colwidth="50pt"/>
  <colspec colnum="3" colname="3"
   align="left" colwidth="50pt"/>
  <thead>
   <row>
    <entry colname="1">Major Family Members</entry>
    <entry colname="2">Spouses</entry>
    <entry colname="3">Children</entry>
   </row>
  </thead>
  <tbody>
   <row>
    <entry colname="1">John Albemarle
        (1760-1806)</entry>
    <entry colname="2">Mary Frances Delaney
        (1769-1835)</entry>
    <entry colname="3">John Delaney Albemarle
        (1787-1848)</entry>
   </row> . . . </tbody>
 </tgroup>
</table>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element table
{
  att.EADGlobal.attributes,
  attribute frame { "top" | "bottom" | "topbot" | "all" | "sides" | "none" }?,
  attribute colsep { "1" | "0" }?,
  attribute rowsep { "1" | "0" }?,
  attribute pgwide { "1" | "0" }?,
  head?,
  tgroup+
}
```

<tbody>

<tbody> (Table Body) A formatting element that contains one or more <row> elements, which in turn contain <entry> elements in a <table>. The <tbody> element identifies the body of the information in a <table>, as distinct from the column headings (Table Head <thead>).

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

valign	**Status**	Optional
	Datatype	
	Legal values are:	**top**
		middle
		bottom

Contained by EAD: tgroup

May contain EAD: row

Note See also related elements <entry>, <row>, <table>, <tgroup>, and <thead>.

Example

```
<table xmlns="urn:isbn:1-931666-22-9" frame="none">
 <tgroup cols="3">
  <colspec colnum="1" colname="1"
   align="left" colwidth="50pt"/>
  <colspec colnum="2" colname="2"
   align="left" colwidth="50pt"/>
  <colspec colnum="3" colname="3"
   align="left" colwidth="50pt"/>
  <thead>
   <row>
    <entry colname="1">Major Family Members</entry>
    <entry colname="2">Spouses</entry>
    <entry colname="3">Children</entry>
   </row>
  </thead>
  <tbody>
   <row>
    <entry colname="1">John Albemarle
        (1760-1806)</entry>
    <entry colname="2">Mary Frances Delaney
        (1769-1835)</entry>
    <entry colname="3">John Delaney Albemarle
```

```
        (1787-1848)</entry>
    </row> . . . </tbody>
  </tgroup>
 </table>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element tbody
{
   att.EADGlobal.attributes,
   attribute valign { "top" | "middle" | "bottom" }?,
   row+
}
```

<tgroup>

<tgroup> (Table Group) A formatting element that bundles <table> subelements: <colspec/>, <thead>, and <tbody>. Tables are comprised of one or more <tgroup>s, depending on the number of times the column specifications change. The <tgroup> element provides a subgrouping of rows within a table that all use the same column specifications.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

cols	**Status**	Optional
	Datatype	
colsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**
		0
rowsep	**Status**	Optional
	Datatype	
	Legal values are:	**1**
		0
align	**Status**	Optional
	Datatype	
	Legal values are:	**left**
		right
		center
		justify
		char

Contained by EAD: table

May contain EAD: colspec tbody thead

Note

Three attributes are used together to force horizontal alignment on a specific character, such as a decimal point. The ALIGN attribute must be set to "char" (align="char"). The CHAR attribute should be set to the specific character on which the text will align (for example the decimal point, char="."). The CHAROFF attribute controls the position of the alignment by naming the percentage of the current column width that is to the left of the alignment character (for example, charoff="30"). The required COLS attribute specifies the number of columns in the table.By convention, any rule specified in COLSEP is printed or displayed to the right of the column. External rules are specified with the FRAME attribute of <table>; horizontal rules are specified with the <table> or <tgroup> ROWSEP attribute.

By convention, any rule specified in rowsep prints or displays below the row. Vertical rules are specified by a COLSEP attribute; external rules are specified by the FRAME attribute of the <table> element.

See also related elements <colspec/>, <table>, <tbody>, <thead>.

Example

```
<odd xmlns="urn:isbn:1-931666-22-9">
 <head>Appendix: Chronological List of the Names of Major Family
   Members, Their Spouses, and Children</head>
 <p>Papers of the individuals listed here make up the greater
   part of the Albemarle Family Papers. Names of children who
   are known not to have survived to adulthood are omitted.</p>
 <table frame="none">
  <tgroup cols="3">
   <colspec colnum="1" colname="1"
    align="left" colwidth="50pt"/>
   <colspec colnum="2" colname="2"
    align="left" colwidth="50pt"/>
   <colspec colnum="3" colname="3"
    align="left" colwidth="50pt"/>
   <thead>
    <row>
     <entry colname="1">Major Family Members</entry>
     <entry colname="2">Spouses</entry>
     <entry colname="3">Children</entry>
    </row>
   </thead>
   <tbody>
    <row>
     <entry colname="1">John Albemarle
          (1760-1806)</entry>
     <entry colname="2">Mary Frances Delaney
          (1769-1835)</entry>
     <entry colname="3">John Delaney Albemarle
          (1787-1848)</entry>
    </row>
    <row>
     <entry colname="3">Lucretia Albemarle Goodrich
          (1788-1823)</entry>
    </row>
    <row>
     <entry colname="3">Porter Breckinridge Albermarle
          (1790-1831)</entry>
```

```
    </row>
    <row>
     <entry colname="3">Joseph Fairfax Albemarle
         (1792-1856)</entry>
    </row>
    <row>
     <entry colname="1">John Delaney Albemarle
         (1787-1848)</entry>
     <entry colname="2">Martha Mary Adams
         (1795-1862)</entry>
     <entry colname="3">John Adams Albemarle
         (1814-1867)</entry>
    </row>
    <row>
     <entry colname="3">Mary Delaney Albemarle
         (1818-1880)</entry>
    </row> . . . </tbody>
  </tgroup>
 </table>
</odd>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element tgroup
{
   att.EADGlobal.attributes,
   attribute cols { xsd:NMTOKEN }?,
   attribute colsep { "1" | "0" }?,
   attribute rowsep { "1" | "0" }?,
   attribute align { "left" | "right" | "center" | "justify" | "char" }?,
   colspec*,
   thead?,
   tbody
}
```

<thead>

<thead> (Table Head) A formatting element that contains the heading information in a <table>, usually column heads, that appears at the top of the table and may appear again at the top of any physical break in rows in the body. The <thead> element is used inside an ordinary structural <table> and to provide column headings for Components <c> or the Description of Subordinate Components <dsc>.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

valign	**Status**	Optional
	Datatype	
	Legal values are:	**top**
		middle

bottom

Contained by	EAD: c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 dsc tgroup
May contain	EAD: row
Note	See related elements <table> and <tgroup> for general table information.
Example	<table xmlns="urn:isbn:1-931666-22-9" frame="none"> <tgroup cols="3"> <colspec colnum="1" colname="1" align="left" colwidth="50pt"/> <colspec colnum="2" colname="2" align="left" colwidth="50pt"/> <colspec colnum="3" colname="3" align="left" colwidth="50pt"/> <thead> <row> <entry colname="1">Major Family Members</entry> <entry colname="2">Spouses</entry> <entry colname="3">Children</entry> </row> </thead> <tbody>[. . .]</tbody> </tgroup> </table>
Content model	<content> </content>

Schema Declaration	element thead
	{
	att.EADGlobal.attributes,
	attribute valign { "top" | "middle" | "bottom" }?,
	row+
	}

<title>

<title> (Title) The formal name of a work, such as a monograph, serial, or painting, listed in a finding aid. Subtitles of such works are not separately encoded but may instead be listed as part of the <title> element.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.access (*@source*, *@rules*, *@authfilenumber*, *@normal*) att.xlink (*@label*, *@href*, *@type*, *@title*, *@from*, *@to*, *@role*, *@actuate*, *@show*, *@arcrole*, *@xpointer*, *@entityref*, *@target*, *@parent*) att.rendered (*@render*)
Member of	model.access.title model.refs
Contained by	EAD: abstract archref bibliography bibref bibseries controlaccess creation descrules dimensions emph entry event extref indexentry item label langmaterial langusage materialspec namegrp origination otherfindaid p physdesc physfacet physloc ref relatedmaterial repository separatedmaterial unitdate unitid unittitle
May contain	EAD: date emph extptr lb num ptr
Note	Do not confuse with <titleproper>, which is used for the title of the encoded finding

aid. Also do not confuse with <unittitle>, which is used to encode the name of the described materials, such as the title of a collection, record group, fonds, series, file, or item. Do not confuse with the TITLE attribute which is found in several linking elements. The <title> element may be used inside of <unittitle>, and it is possible that a <unittitle> may contain no text other than that which is further specified by the <title> element. (See example below.)The RULES attribute can be used to specify the descriptive rules followed when forming the title, such as AACR2R. The ENTITYREF or HREF attributes may be used to name either the entity or pointer when linking to a machine-readable version of the cited <title>. The RENDER attribute permits specification of how the content of a particular <title> element should be displayed or printed, e.g., bold, italics, quoted, etc. The <title> element is comparable to MARC fields 130, 240, 245, 630, 730, and 740.

While XML Linking Language (XLink) Version 1.0, which is the basis for EAD linking elements, is a stable document, examples of EAD usage are hypothetical and have not been tested in real XLink-based applications. Those wishing to use XLink are encouraged to consult the specification available online at http://www.w3.org/TR/xlink.

Example

```
<c01 xmlns="urn:isbn:1-931666-22-9">
 <did>
  <unittitle>Short stories, </unittitle>
  <unitdate>1946-1954</unitdate>
 </did>
 <c02>
  <did>
   <unittitle>
    <title render="italic">The Lottery</title>
   </unittitle>
  </did>
 </c02>
</c01>
```

Example

```
<bibref xmlns="urn:isbn:1-931666-22-9">
 <title render="italic">Library of Congress Acquisitions:
   Manuscript Division, <date>1982,</date>
 </title> p. 29.
</bibref>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element title
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.access.attributes,
   att.xlink.attributes,
   att.rendered.attributes,
   ( text | model.phrase.bare | date | num )*
}
```

<titlepage>

<titlepage> (Title Page) A wrapper element within <frontmatter> that groups bibliographic information about an encoded finding aid, including its name, author, and other aspects of its creation and publication. It contains much of the same information found in the <filedesc> portion of the <eadheader>, such as the <titleproper>, <subtitle>, <author>, <sponsor>, <publisher>, and <date> of the finding aid. Although it is possible to generate an electronic or printed title page directly from the <eadheader>, use of the <titlepage> may be more accommodating of local preferences, including displays of photographic illustrations, institutional logos, or other graphic images.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*)

Contained by EAD: frontmatter

May contain EAD: author bibseries date edition num publisher sponsor subtitle titleproper

Example

```
<frontmatter xmlns="urn:isbn:1-931666-22-9">
 <titlepage>
  <titleproper>Inventory of The Arequipa Sanatorium Records,
  <date>1911-1958</date>
  </titleproper>
  <num type="Collection number:">BANC MSS 92/894 c</num>
  <publisher>The Bancroft Library<lb/>University of
     California, Berkeley<lb/>Berkeley, California </publisher>
  <list type="deflist">
   <defitem>
    <label>Processed by:</label>
    <item>Lynn Downey</item>
   </defitem>
   <defitem>
    <label>Completed by:</label>
    <item>Mary Morganti and Katherine Bryant</item>
   </defitem>
   <defitem>
    <label>Date Completed:</label>
    <item>
     <date>May 1994</date>
    </item>
   </defitem>
   <defitem>
    <label>Encoded by:</label>
    <item>Gabriela A. Montoya</item>
   </defitem>
  </list>
  <p>© 1996 The Regents of the University of California. All
     rights reserved.</p>
 </titlepage>
</frontmatter>
```

Content model

```
<content>
</content>
```

Schema Declaration element titlepage

```
{
  att.EADGlobal.attributes,
  (
    m.blocks
  | author
  | date
  | edition
  | num
  | publisher
  | bibseries
  | sponsor
  | titleproper
  | subtitle
  )+
}
```

<titleproper>

<titleproper> (Title Proper of the Finding Aid) The name of the finding aid or finding aid series.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.rendered (*@render*)
Contained by	EAD: seriesstmt titlepage titlestmt
May contain	EAD: abbr date emph expan extptr lb num ptr
Note	The <titleproper> element is required within the <titlestmt> subelement of <filedesc>, part of the <eadheader>. It may also be optionally used in the <titlepage> subelement of <frontmatter>. To encode the name of a finding aid series, <titleproper> may be used in the optional <seriesstmt> subelement of <filedesc>.The <titlestmt> relates to the finding aid and should not be confused with Title <title>, used to encode the formal names of works such as monographs, serials, paintings, etc., listed in the finding aid, or with Title of the Unit <unittitle>, used to encode the name of the described materials.

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper> Inventory of the Kingsley Amis Papers,
  <date>1941-1995</date>
  </titleproper>
  <author>Processed by Sara S. Hodson; machine-readable
    finding aid created by Xiuzhi Zhou</author>
 </titlestmt> . . . </filedesc>
```

Example

```
<frontmatter xmlns="urn:isbn:1-931666-22-9">
 <titlepage>
  <titleproper> Inventory of The Arequipa Sanatorium Records,
  <date>1911-1958</date>
  </titleproper>
  <num type="Collection number:">BANC MSS 92/894 c</num>
  <publisher>The Bancroft Library<lb/>University of
    California, Berkeley<lb/>Berkeley, California </publisher>
  <p>© 1996 The Regents of the University of California. All
    rights reserved.</p>
 </titlepage>
</frontmatter>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element titleproper
{
  att.EADGlobal.attributes,
  att.typed.attributes,
  att.rendered.attributes,
  ( text | model.phrase.bare | abbr | date | expan | num )*
}
```

<titlestmt>

<titlestmt> (Title Statement) A required wrapper element within the <filedesc> portion of <eadheader> that groups information about the name of an encoded finding aid and those responsible for its intellectual content. Like much of the <eadheader>, the <titlestmt> element is modeled on an element found in the Text Encoding Initiative (TEI) DTD, and its subelements must adhere to the following prescribed sequence: a required <titleproper>, followed by an optional <subtitle>, optional <author>, and optional <sponsor>.

Module EAD

Attributes att.EADGlobal (@*id*, @*altrender*, @*audience*, @*encodinganalog*)

Contained by EAD: filedesc

May contain EAD: author sponsor subtitle titleproper

Note The <titlestmt> relates to the finding aid and should not be confused with Title <title>, used to encode the formal names of works such as monographs, serials, paintings, etc., listed in the finding aid. Also do not confuse with Title of the Unit <unittitle>, used to encode the name of the described materials.

Example

```
<filedesc xmlns="urn:isbn:1-931666-22-9">
 <titlestmt>
  <titleproper> Inventory of the Kingsley Amis Papers,
  <date>1941-1995</date>
  </titleproper>
  <author>Processed by Sara S. Hodson; machine-readable
     finding aid created by Xiuzhi Zhou</author>
 </titlestmt> . . . </filedesc>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element titlestmt
{
  att.EADGlobal.attributes,
  ( titleproper+, subtitle?, author?, sponsor? ),
  text
}
```

<unitdate>

<unitdate> (Date of the Unit) The creation year, month, or day of the described materials. The

<unitdate> may be in the form of text or numbers, and may consist of a single date or range of dates. As an important subelement of the Descriptive Identification <did>, the <unitdate> is used to tag only the creation and other relevant dates of the materials described in the encoded finding aid. Do not confuse it with the <date> element, which is used to tag all other dates.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.normalized (*@normal*) att.labeled (*@label*) att.calendar (*@calendar*) att.era (*@era*) att.certainty (*@certainty*)

type — characterizes the element in some sense, using any convenient classification scheme or typology.
Derived from att.typed
Status Optional
Datatype

datechar — Term characterizing the nature of dates, such as dates of creation, accumulation, or modification.
Status Optional
Datatype

Member of model.data model.did

Contained by EAD: archref did entry event extrefloc item label p ref refloc unittitle

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp ptr ref subtitle title

Note A standard numeric form of the date (YYYYMMDD, etc.) can be specified with the NORMAL attribute to facilitate machine comparison of dates for search purposes. The TYPE attribute may be used to indicate whether the <unitdate> represents inclusive dates or bulk (predominant) dates. The CERTAINTY attribute may be applied to indicate if the date has been supplied or estimated by the archivist. The DATECHAR attribute can be used to supply a term characterizing the nature of the dates, such as creation or accumulation. The CALENDAR attribute, which has a default value of "gregorian," specifies the calendar from which the date stems. The value "ce" (common or Christian era) is the default for the ERA attribute.The <unitdate> may be nested within the <unittitle> or used independently of that element.
This element is comparable to ISAD(G) element 3.1.3, and MARC fields 245 subfield f for inclusive dates, 245 subfield g for bulk dates, or 260 subfield c.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>
  <head>Collection Summary</head>
  <origination label="Creator">
   <corpname encodinganalog="110">National Association for the Advancement of
Colored
      People</corpname>
  </origination>
  <unittitle label="Title"
   encodinganalog="245">Visual
    Materials from the National Association for the
    Advancement of Colored People Records (Library of
    Congress)</unittitle>
  <unitdate label="Dates" type="inclusive"
   encodinganalog="260"> ca. 1838-1969, </unitdate>
  <unitdate type="bulk">bulk 1944-1955</unitdate>
 </did>
</archdesc>
```

Example <dsc xmlns="urn:isbn:1-931666-22-9" type="analyticover">

```
<c level="subseries">
 <did>
  <unittitle>Documentary Movies, </unittitle>
  <unitdate type="inclusive"
   normal="1952/1964">1952-1964</unitdate>
  <physdesc>
   <extent>2.5 linear ft.</extent>
  </physdesc>
  <abstract>Includes scores, arranged alphabetically by
     movie title, and some correspondence, arranged
     chronologically.</abstract>
 </did>
</c> . . . </dsc>
```

Schematron <unitdates> COULD have a *label* attribute or an *encodinganalog* attribute, describing the type of date

```
<s:rule context="ead:unitdate"> <s:assert role="COULD"  test="normalize-space(@label) or normalize-space(@encodinganalog)">unitdates COULD have a label attribute or an encodinganalog attribute, describing the type of date</s:assert> </s:rule>
```

Schematron <unitdate> SHOULD have a non-empty *normal* attribute

```
<s:rule context="ead:unitdate"> <s:assert role="SHOULD"  test="normalize-space(@normal)">unitdate should have a non-empty @normal attribute</s:assert> </s:rule>
```

Schematron The *normal* attribute of <unitdate> must respect the ISO8601 pattern = YYYY-MM-DD

```
<s:rule context="ead:unitdate"> <s:assert role="MUST"  test="matches(@normal, '^(\d{4}-?\d{2}-?\d{2}/?){1,2}$')">date format MUST be valid. @normal attribute must respect ISO8601 pattern = YYYY-MM-DD</s:assert> <s:let name="start-date"  value="replace(@normal, '/.*', '')"/> <s:let name="start-date"  value="replace($start-date, '-', '')"/> <s:let name="start-date"  value="string-join((substring($start-date, 1, 4), substring($start-date, 5, 2), substring($start-date, 7, 2)), '-')"/> <s:assert role="MUST"  test="$start-date castable as xs:date">start date MUST exist</s:assert> <s:let name="end-date"  value="replace(@normal, '.*/', '')"/> <s:let name="end-date"  value="replace($end-date, '-', '')"/> <s:let name="end-date"  value="string-join((substring($end-date, 1, 4), substring($end-date, 5, 2), substring($end-date, 7, 2)), '-')"/> <s:assert role="MUST"  test="$end-date castable as xs:date">end date MUST exist</s:assert> </s:rule>
```

Content model

```
<content/>
```

Schema Declaration

```
element unitdate
{
   att.EADGlobal.attributes,
   att.normalized.attributes,
   att.labeled.attributes,
   att.calendar.attributes,
   att.era.attributes,
   att.certainty.attributes,
   attribute type { data.enumerated }?,
   attribute datechar { text }?,
```

(text | model.phrase.basic)*
}

<unitid>

<unitid> (ID of the Unit) Any alpha-numeric text string that serves as a unique reference point or control number for the described material, such as a lot number, an accession number, a classification number, or an entry number in a bibliograph y or catalog. An important subelement of the Descriptive Identification <did>, the <unitid> is primarily a logical designation, which sometimes secondarily provides location information, as in the case of a classification number. Use other <did> subelements, such as <physloc> and <container>, to designate specifically the physical location of the described materials.

Module EAD

Attributes att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.labeled (*@label*) att.coded (*@countrycode*)

repositorycode — A unique code indicating the repository responsible for intellectual control of the materials being described.
- **Status** Optional
- **Datatype**
- **Note** The code should be taken from ISO/DIS 15511 Information and documentation--International Standard Indentifier for Libraries and Related Oranizations (ISIL), as specified in the <eadheader> *repositoryencoding* attribute.

identifier — A machine-readable unique identifier.
- **Status** Optional
- **Datatype**

Member of model.did

Contained by EAD: archref did

May contain EAD: abbr archref bibref emph expan extptr extref lb linkgrp ptr ref subtitle title

Note Do not confuse <unitid>, which relates to the archival materials, with <eadid>, which is used to designate a unique identification string for the finding aid.Although not required, the COUNTRYCODE and REPOSITORYCODE attributes should be used in <unitid> at the <archdesc><did> level to comply with ISAD(G) element 3.1.1. REPOSITORYCODE specifies the ISO 15511 code for the institution that has custody of the materials described, while COUNTRYCODE provides the ISO 3166-1 code for the country in which that institution is located. IDENTIFIER should contain a machine-readable unique identifier, containing a value similar to the text in the <unitid> element. The TYPE attribute may be used to indicate the system from which the <unitid> was derived, e.g., accessioning system, record group classification scheme, records retention scheduling system, etc.

Example

```
<archdesc xmlns="urn:isbn:1-931666-22-9" level="collection">
 <did>
  <head>Descriptive Summary</head>
  <unittitle label="Title">Donald C. Stone, Jr. Papers, </unittitle>
  <unitdate type="inclusive">1971-1983</unitdate>
  <unitid countrycode="us"
   repositorycode="cbgtu" label="Accession number"> GTU 2001-8-03</unitid>
  <origination label="Creator">
   <persname source="lcnaf"> Stone, Donald C., Jr.
   </persname>
```

```
</origination>
<physdesc label="Extent">
 <extent>4 boxes, </extent>
 <extent>4
    linear ft.</extent>
</physdesc>
<repository label="Repository"> The <corpname>Graduate
    Theological Union</corpname>
 <address>
  <addressline>Berkeley,
     California</addressline>
 </address>
</repository>
<abstract label="Abstract">The papers document Donald C.
   Stone's work with Ornstein and Swencionis on the <emph render="italic">est</
emph> Outcome Project, and the
   development of his doctoral research, including his
   various publications on the human potential movement, up
   to the completion of his doctoral
   dissertation.</abstract>
<physloc label="Shelf location">5/D/4-5</physloc>
</did> . . . </archdesc>
```

Schematron Each unit of description SHOULD have an indentifier in the element <unitid>.

```
<s:rule context="ead:unitid"> <s:assert role="SHOULD"  test="normalize-
space(.)">a unitid SHOULD not be empty</s:assert> </s:rule>
```

Schematron In a given EAD document, all the <unitid> elements MUST be unique

```
<s:rule context="ead:unitid"> <s:assert role="MUST"
 test="count(//ead:unitid[@label = 'ehri_main_identifier']) = count(distinct-
values(//unitid[@label = 'ehri_main_identifier']))">unitid's MUST be unique within
one ead file</s:assert> </s:rule>
```

Schematron If the repositoryencoding is set to iso15511, the format of the value of the *repositorycode* attribute is constrained according to the International Standard Identifier for Libraries and Related Organizations (ISIL: ISO 15511): a prefix, a dash, and an identifier.

```
<s:rule context="*[@repositorycode]
[preceding::ead:eadHeader/@repositoryencoding = 'iso15511']">
<s:let name="iso15511Pattern"  value="'(^([A-Z]{2})|([a-zA-Z]{1})|([a-zA-Z]{3,4}))(-
[a-zA-Z0-9:/\-]{1,11})$'"/> <s:assert test="matches(@repositorycode,
$iso15511Pattern)"  role="SHOULD">If the repositoryencoding is set to iso15511,
the format of the value of the <s:emph>repositorycode</s:emph> attribute of
<s:name/> is constrained according to the International Standard Identifier for
Libraries and Related Organizations (ISIL: ISO 15511): a prefix, a dash, and an
identifier.</s:assert> </s:rule>
```

Content model

```
<content/>
```

Schema Declaration

```
element unitid
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.labeled.attributes,
```

```
  att.coded.attributes,
  attribute repositorycode
  {
    token
    {
      pattern = "((AF|AX|AL|DZ|AS|AD|AO|AI|AQ|AG|AR|AM|AW|AU|AT|AZ|BS|
BH|BD|BB|BY|BE|BZ|BJ|BM|BT|BO|BA|BW|BV|BR|IO|BN|BG|BF|BI|KH|CM| CA|
CV|KY|CF|TD|CL|CN|CX|CC|CO|KM|CG|CD|CK|CR|CI|HR|CU|CY|CZ|DK|DJ|DM|
DO|EC|EG|SV|GQ|ER|EE|ET|FK|FO|FJ|FI|FR|GF|PF|TF|GA|GM|GE |DE|GH|GI|
GR|GL|GD|GP|GU|GT|GN|GW|GY|HT|HM|VA|HN|HK|HU|IS|IN|ID|IR|IQ|IE|IL|IT|
JM|JP|JO|KZ|KE|KI|KP|KR|KW|KG|LA|LV|LB|LS|LR|LY |LI|LT|LU|MO|MK|MG|
MW|MY|MV|ML|MT|MH|MQ|MR|MU|YT|MX|FM|MD|MC|MN|MS|MA|MZ|MM|NA|
NR|NP|NL|AN|NC|NZ|NI|NE|NG|NU|NF|MP|NO|OM|PK|PW| PS|PA|PG|PY|PE|
PH|PN|PL|PT|PR|QA|RE|RO|RU|RW|SH|KN|LC|PM|VC|WS|SM|ST|SA|SN|CS|
SC|SL|SG|SK|SI|SB|SO|ZA|GS|ES|LK|SD|SR|SJ|SZ|SE|CH |SY|TW|TJ|TZ|TH|TL|
TG|TK|TO|TT|TN|TR|TM|TC|TV|UG|UA|AE|GB|US|UM|UY|UZ|VU|VE|VN|VG|VI|
WF|EH|YE|ZM|ZW)| ([a-zA-Z]{1})|([a-zA-Z]{3,4}))(-[a-zA-Z0-9:/\-]{1,11})"
    }
  }?,
  attribute identifier { ( text | model.phrase.bare )* }?,
  ( text | model.phrase.basic )*
}
```

<unittitle>

<unittitle> (Title of the Unit) The name, either formal or supplied, of the described materials. May consist of a word, phrase, character, or group of characters. As an important subelement of the Descriptive Identification <did>, the <unittitle> encodes the name of the described materials at both the highest unit or <archdesc> level (e.g., collection, record group, or fonds) and at all the subordinate Component <c> levels (e.g., subseries, files, items, or other intervening stages within a hierarchical description).

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*) att.labeled (*@label*)
Member of	model.data model.did
Contained by	EAD: archref did entry event extrefloc item label p ref refloc
May contain	EAD: abbr archref bibref bibseries corpname date edition emph expan extptr extref famname function genreform geogname imprint lb linkgrp name num occupation persname ptr ref subject subtitle title unitdate
Note	Do not confuse <unittitle> with Title <title>, a more general element used to encode the formal names of works such as monographs, serials, paintings, etc. Also do not confuse with Title Proper of the Finding Aid <titleproper>, used to designate the name of a finding aid, or a finding aid series encoded in EAD.The <unittitle> element is comparable to ISAD(G) element 3.1.2 and MARC field 245.
Example	<c xmlns="urn:isbn:1-931666-22-9" level="subseries"> <did> <unittitle>Documentary Movies, </unittitle> <unitdate type="inclusive">1952-1964</unitdate> <physdesc> <extent>2.5 linear ft.</extent> </physdesc> <abstract label="Summary:">Includes scores, arranged

```
      alphabetically by movie title, and some correspondence,
      arranged chronologically.</abstract>
   </did>
  </c>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element unittitle
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   att.labeled.attributes,
   (
      text
    | model.phrase.basic
    | model.access
    | unitdate
    | num
    | date
    | bibseries
    | edition
    | imprint
   )*
}
```

<userestrict>

<userestrict> (Conditions Governing Use) Information about conditions that affect use of the described materials after access has been granted.

Module	EAD
Attributes	att.EADGlobal (*@id*, *@altrender*, *@audience*, *@encodinganalog*) att.typed (*@type*)
Member of	model.desc.base
Contained by	EAD: archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 descgrp userestrict
May contain	EAD: address blockquote chronlist head list note p table userestrict
Note	May indicate limitations, regulations, or special procedures imposed by a repository, donor, legal statute, or other agency regarding reproduction, publication, or quotation of the described materials. May also indicate the absence of restrictions, such as when copyright or literary rights have been dedicated to the public. Do not confuse with Conditions Governing Access <accessrestrict>, which designates information about conditions affecting the availability of the described materials. Preferred Citation <prefercite> may be used in conjunction with <userestrict> to encode statements specifying how the described materials should be referenced when reproduced, published, or quoted by patrons.In EAD Version 1.0 <userestrict> was a subelement of Administrative Information <admininfo>, which has been deprecated in EAD 2002 (see Appendix B). The new Description Group <descgrp> element, which can group any of the <did>-level elements (except the Description of Subordinate Components <dsc>), may be used to wrap elements where a group heading is desirable. The <descgrp>

element can be used to replace <admininfo> where it has been used as a wrapper when converting finding aids encoded in EAD V1.0 to EAD 2002. The <userestrict> element is comparable to ISAD(G) data element 3.4.2 and MARC field 540.

Example

```
<userestrict xmlns="urn:isbn:1-931666-22-9">
 <p>Until 2015 permission to photocopy some materials from this
   collection has been limited at the request of the donor.
   Please ask repository staff for details if you are
   interested in obtaining photocopies from Series 1:
   Correspondence.</p>
</userestrict>
```

Example

```
<userestrict xmlns="urn:isbn:1-931666-22-9">
 <p>Copyright to the collection has been transferred to the
   Regents of the University of Michigan.</p>
</userestrict>
```

Content model

```
<content>
</content>
```

Schema Declaration

```
element userestrict
{
   att.EADGlobal.attributes,
   att.typed.attributes,
   head?,
   ( model.blocks | userestrict )+
}
```

Model classes

model.access

model.access
Module EAD
Used by model.access.title model.data physdesc physfacet unittitle
Members *corpname famname function genreform geogname name occupation persname subject*

model.access.title

model.access.title
Module EAD
Used by controlaccess indexentry namegrp
Members *model.access[corpname famname function genreform geogname name occupation persname subject] subtitle title*

model.blocks

model.blocks
Module EAD
Used by accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist daodesc descgrp div dsc dscgroup index note

odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial userestrict

Members *model.inter[model.inter.noquote[address chronlist list note table] blockquote] p*

model.data

model.data
Module EAD
Used by model.para.content.norefs model.phrase.plus
Members *model.access[corpname famname function genreform geogname name occupation persname subject] date num origination repository unitdate unittitle*

model.desc.base

model.desc.base Basic descriptive elements for the <did> element
Module EAD
Used by descgrp model.desc.full
Members *accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist descgrp fileplan odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial userestrict*

model.desc.full

model.desc.full Complete set of Descriptive elements for the <did> element
Module EAD
Used by archdesc archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12
Members *model.desc.base[accessrestrict accruals acqinfo altformavail appraisal arrangement bibliography bioghist controlaccess custodhist descgrp fileplan odd originalsloc otherfindaid phystech prefercite processinfo relatedmaterial scopecontent separatedmaterial userestrict] dao daogrp dsc note*

model.did

model.did
Module EAD
Used by archref did
Members *abstract container dao daogrp langmaterial materialspec note origination physdesc physloc repository unitdate unitid unittitle*

model.extended.els

model.extended.els
Module EAD
Used by daogrp linkgrp
Members *arc extptrloc extrefloc ptrloc refloc resource*

model.inter

model.inter
Module EAD
Used by model.blocks model.para.content model.para.content.norefs
Members *model.inter.noquote[address chronlist list note table] blockquote*

model.inter.noquote

model.inter.noquote
Module EAD
Used by blockquote model.inter
Members *address chronlist list note table*

model.para.content

model.para.content
Module EAD
Used by event item p
Members *model.inter[model.inter.noquote[address chronlist list note table] blockquote] model.phrase.plus[model.data[model.access[corpname famname function genreform geogname name occupation persname subject] date num origination repository unitdate unittitle] model.phrase.basic.norefs[model.phrase.bare[model.render[emph lb] extptr ptr] abbr expan] model.refs[archref bibref extref linkgrp ref subtitle title]]*

model.para.content.norefs

model.para.content.norefs
Module EAD
Used by extrefloc ref refloc
Members *model.data[model.access[corpname famname function genreform geogname name occupation persname subject] date num origination repository unitdate unittitle] model.inter[model.inter.noquote[address chronlist list note table] blockquote] model.phrase.basic.norefs[model.phrase.bare[model.render[emph lb] extptr ptr] abbr expan]*

model.phrase.bare

model.phrase.bare
Module EAD
Used by addressline author bibseries container corpname date edition famname function genreform geogname head head01 head02 imprint language legalstatus model.phrase.basic.norefs name num occupation persname publisher runner sponsor subarea subject subtitle title titleproper
Members *model.render[emph lb] extptr ptr*

model.phrase.basic

model.phrase.basic
Module EAD
Used by abstract creation descrules dimensions emph langmaterial langusage materialspec origination physdesc physfacet physloc repository unitdate unitid unittitle
Members *model.phrase.basic.norefs[model.phrase.bare[model.render[emph lb] extptr ptr] abbr expan] model.refs[archref bibref extref linkgrp ref subtitle title]*

model.phrase.basic.norefs

model.phrase.basic.norefs

Module EAD
Used by archref bibref model.para.content.norefs model.phrase.basic model.phrase.plus
Members *model.phrase.bare[model.render[emph lb] extptr ptr] abbr expan*

model.phrase.plus

model.phrase.plus
Module EAD
Used by entry label model.para.content
Members *model.data[model.access[corpname famname function genreform geogname name occupation persname subject] date num origination repository unitdate unittitle] model.phrase.basic.norefs[model.phrase.bare[model.render[emph lb] extptr ptr] abbr expan] model.refs[archref bibref extref linkgrp ref subtitle title]*

model.refs

model.refs
Module EAD
Used by bibliography model.phrase.basic model.phrase.plus otherfindaid relatedmaterial separatedmaterial
Members *archref bibref extref linkgrp ref subtitle title*

model.render

model.render
Module EAD
Used by model.phrase.bare resource
Members *emph lb*

Attribute classes

att.EADGlobal

att.EADGlobal provides attributes common to all elements in the EAD encoding scheme.
Module EAD
Members *abbr abstract accessrestrict accruals acqinfo address addressline altformavail appraisal archdesc archdescgrp archref arrangement author bibliography bibref bibseries bioghist blockquote c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12 change chronitem chronlist colspec container controlaccess corpname creation custodhist dao daodesc daogrp daoloc date defitem descgrp descrules did dimensions div dsc dscgroup ead eadheader eadid edition editionstmt emph entry event eventgrp expan extent extptr extptrloc extref extrefloc famname filedesc fileplan frontmatter function genreform geogname head head01 head02 imprint index indexentry item label langmaterial language langusage lb legalstatus linkgrp list listhead materialspec name namegrp note notestmt num occupation odd originalsloc origination otherfindaid p persname physdesc physfacet physloc phystech prefercite processinfo profiledesc ptr ptrgrp ptrloc publicationstmt publisher ref refloc relatedmaterial repository resource revisiondesc row runner scopecontent separatedmaterial seriesstmt sponsor subarea subject subtitle table tbody tgroup thead title titlepage titleproper titlestmt unitdate unitid unittitle userestrict*
Attributes id Left span boundary

		Status	Optional
		Datatype	
	altrender	**Status**	Optional
		Datatype	
	audience	**Status**	Optional
		Datatype	
		Legal values are:	**internal**
			external

encodinganalog A field or element in another descriptive encoding system to which an EAD element or attribute is comparable.

Status Optional

Datatype

```
<origination xmlns="urn:isbn:1-931666-22-9">
 <corpname encodinganalog="MARC 110">Waters
  Studio</corpname>
</origination>
<archdesc xmlns="urn:isbn:1-931666-22-9" relatedencoding="
MARC">
 <origination>
  <persname encodinganalog="100$a$q$d$e"
   source="lcnaf"> Waters, E. C. (Elizabeth Cat),
    1870-1944, photographer </persname>
 </origination>
</archdesc>
```

Note Mapping elements from one system to another may help build a single user interface that can index comparable information in bibliographic records and finding aids. The mapping designations may also help a repository harvest selected data from a finding aid to build a basic catalog record. When possible, subfields as well as fields should be specified, e.g., subfields within MARC fields. If the *relatedencoding* attribute in <ead> , <eadheader>, or <archdesc> is not used to identify the encoding system from which fields are specified in the *encodinganalog* attribute, then include the system designation in *encodinganalog*.

att.access

att.access			
Module	EAD		
Members	*corpname famname function genreform geogname name occupation persname subject title*		
Attributes	source	**Status**	Optional
		Datatype	
	rules	**Status**	Optional
		Datatype	
	authfilenumber	**Status**	Optional
		Datatype	

	normal	A consistent form, usually from a controlled vocabulary list to facilitate retrieval	
		Status	Optional
		Datatype	
		Note	In <date> and <unitdate>, the NORMAL attribute follows ISO 8601 Representation of Dates and Times, as specified in the DATEENCODING attribute in <eadheader>.

att.calendar

att.calendar			
Module	EAD		
Members	*date unitdate*		
Attributes	calendar	**Status**	Optional
		Datatype	
		Default	gregorian

att.certainty

att.certainty			
Module	EAD		
Members	*date unitdate*		
Attributes	certainty	**Status**	Optional
		Datatype	

att.coded

att.coded Groups together various attribute used to provide additional codes on elements

Module	EAD		
Members	*eadid unitid*		
Attributes	countrycode	A unique code for the country in which the materials being described are held.	
		Status	Optional
		Datatype	
		Schematron	The *countrycode* attribute SHOULD contain a code from the ISO 3166-1 codelist. This list is maintained in TEI by the Parthenos project under the link <s:rule context="*[exists(@countrycode)]"> <s:let name="countrycodes" value="document('https://raw.githubusercontent.com/ParthenosWP4/standardsLibrary/master/ISO/ISO3166/ISO3166_TEI.xml')"/> <s:let name="code" value="normalize-space(@countrycode)"/> <s:assert test="$countrycodes//tei:f[@name='a2code']/tei:symbol/@value = $code " role="COULD"> The countrycode attribute should contain a code from the ISO 3166-1 codelist.</s:assert> </s:rule>
		Note	Codes are to be taken from ISO 3166-1

Codes for the Representation of Names of Countries, column A2.

att.desc.c

att.desc.c

Module EAD

Members *archdescgrp c c01 c02 c03 c04 c05 c06 c07 c08 c09 c10 c11 c12*

Attributes

level — The hierarchical level of the materials being described by the element.

- **Status** Optional
- **Datatype**
- **Schematron** If the attribute *level* has the value 'otherlevel', an attribute *otherlevel* MUST be added
  <s:rule context="ead:ead">
  <s:assert role="MUST" test="not(@level = 'otherlevel') or (@otherlevel and not(@otherlevel = ''))">If the attribute level has the value 'otherlevel', an attribute otherlevel MUST be added</s:assert> </s:rule>
- **Schematron** The <archdesc> element can have for *level* the value 'fonds', not the subcomponents, <c01> to <c06>
  <s:rule context="ead:ead">
  <s:assert role="SHOULD" test="not(@level = 'fonds') or name(.) = 'archdesc'">The archdesc can have for level the value 'fonds", not the subcomponents.</s:assert> </s:rule>
- **Schematron** A component with *level*="recordgrp" SHOULD be a child of another component with *level*="recordgrp"
  <s:rule context="ead:ead">
  <s:assert role="SHOULD" test="not(@level = 'recordgrp') or (parent::*[@level = 'recordgrp'] or (name(.) = 'archdesc') or (name(.) = 'c01') and ancestor::*[@level = 'recordgrp'])">recordgrp SHOULD be a child of another recordgrp</s:assert> </s:rule>
- **Schematron** A component with *level*="subgrp" SHOULD be a child of another component with *level*="subgrp" or "recordgrp"
  <s:rule context="ead:ead">
  <s:assert role="SHOULD" test="not(@level = 'subgrp') or ((parent::*[@level = 'recordgrp' or @level = 'subgrp']) or (name(.) = 'c01') and ancestor::*[@level = 'recordgrp'])">subgrp SHOULD be a child of another subgrp or a recordgrp</s:assert> </s:rule>
- **Schematron** A component with *level*="subseries" SHOULD be a child of another component with *level*="subseries" or "series"
  <s:rule context="ead:ead">

<s:assert role="SHOULD" test="not(@level = 'subseries') or parent::*[@level = 'subseries' or @level = 'series']">subseries SHOULD be a child of another subseries or a series</s:assert>
</s:rule>

Legal values are:	**class** **collection** **fonds** **item** **otherlevel** **recordgrp** **series** **subfonds** **subgrp** **subseries** **file**
Note	This attribute is available in <archdesc>>, where the highest level of material represented in the finding aid must be declared (e.g., collection, fonds, record group), and in c and c01-12 (e.g., subgroup, series, file). If none of the values in the semi-closed list are appropriate, the value "otherlevel" may be chosen and the term specified in the OTHERLEVEL attribute. Values are: collection fonds class recordgrp series subfonds subgrp subseries file item otherlevel

otherlevel — The hierarchical level of the materials described in <archdesc>, c, <c01-12>, and <archdescgrp> can be specified when the semi-closed list in the LEVEL attribute (e.g., collection, fonds, series, etc.) does not contain an appropriate term.

Status	Optional
Datatype	
Note	Set LEVEL to "otherlevel" and then supply the preferred term in the OTHERLEVEL attribute.

att.dsctab.tpattern

att.dsctab.tpattern

Module	EAD
Members	*dsc*

Attributes	tpattern	**Status**	Optional
		Datatype	

att.encodings

att.encodings

Module	EAD		
Members	*eadheader*		
Attributes	countryencoding	The authoritative source or rules for values supplied in the *countrycode* attribute in <eadid> and <unitid>.	
		Status	Optional
		Datatype	
		Default	iso3166-1
	langencoding	Language encoding for EAD instances subscribes to ISO 639-2b Codes for the Representation of Names of Languages, so the *langencoding* attribute value in <eadheader> should be "iso639-2b." The codes themselves are specified in the LANGCODE attribute in <abstract> or <language>, as appropriate.	
		Status	Optional
		Datatype	
		Default	iso639-2b
	scriptencoding	The authoritative source or rules for values supplied in the *scriptcode* attribute in <language>.	
		Status	Optional
		Datatype	
		Default	iso15924
	repositoryencoding	The authoritative source or rules for values supplied in the *mainagencycode* attribute in <eadid> and the *repositorycode* attribute in <unitid>.	
		Status	Optional
		Datatype	
		Default	iso15511
	dateencoding	The authoritative source or rules for values provided in the *normal* attribute in <date> and <unitdate>.	
		Status	Optional
		Datatype	
		Default	iso8601

att.era

att.era

Module	EAD		
Members	*date unitdate*		
Attributes	era	**Status**	Optional
		Datatype	

att.labeled

att.labeled

Module	EAD
Members	*abstract container dimensions extent langmaterial materialspec note origination physdesc physfacet physloc repository unitdate unitid unittitle*

Attributes	label	A display label for an element can be supplied using this attribute when a meaningful label cannot be derived by the style sheet from the element name or when a heading element <head> is not available.
		Status Optional

att.langcode

att.langcode
Module EAD
Members *abstract language*

Attributes	langcode	The three-lettter code for the language in which an abstract is written <abstract>, for the language of the finding aid and the language of the materials <language>.
		Status Optional
		Datatype
		Schematron The *langcode* attribute SHOULD contain a code from the ISO 639 codelist. This list is maintained in TEI by the Parthenos project under the link <s:rule context="*[exists(@langcode)]"> <s:let name="langcodes" value="document('https://raw.githubusercontent.com/ParthenosWP4/standardsLibrary/master/ISO/ISO639/IANA2TEI/ISO639_TEI.xml')"/> <s:let name="code" value="normalize-space(@langcode)"/> <s:assert test="$langcodes//tei:f[@name='subType']/tei:symbol/@value = $code " role="COULD">The langcode attribute SHOULD contain a code from the ISO 639 codelist.</s:assert> </s:rule>
		Note The codes should be taken from ISO639-2b, as specified in the LANGENCODING attribute in <eadheader>.

att.normalized

att.normalized Definition of the *normal* attribute
Module EAD
Members *date unitdate*

Attributes	normal	A consistent form, usually from a controlled vocabulary list to facilitate retrieval
		Status Optional
		Datatype
		Note In <date> and <unitdate>, the NORMAL attribute follows ISO 8601 Representation of Dates and Times, as specified in the DATEENCODING attribute in <eadheader>.

att.relatedencoding

att.relatedencoding
Module EAD

Members	*archdesc archdescgrp ead eadheader*		
Attributes	relatedencoding	A descriptive encoding system, such as MARC, ISAD(G), or Dublin Core, to which certain EAD elements can be mapped using the <encodinganalog> attribute.	
		Status	Optional
		Datatype	

att.rendered

att.rendered			
Module	EAD		
Members	*emph title titleproper*		
Attributes	render	**Status**	Optional
		Datatype	
		Legal values are:	**altrender bold** **bolddoublequote** **boldsinglequote** **boldsmcaps** **boldunderline** **doublequote** **italic** **nonproport** **singlequote** **smcaps** **sub** **super** **underline**

att.roled

att.roled		
Module	EAD	
Members	*archref bibref corpname famname geogname name persname refloc runner*	
Attributes	role	A contextual role or relationship for the person, family, corporate body, or geographic location. In linking elements such as <ptr/>, information that explains to application software the part that a remote resource plays in a link.

Status Optional

att.scriptcode

att.scriptcode
Module EAD
Members *language*
Attributes scriptcode The four-letter code for the writing script used with a given language.
Optional

The *scriptcode* attribute SHOULD contain a code from the ISO 15924 codelist. This list is maintained in TEI by the Parthenos project under the link
<s:rule context="*[exists(@scriptcode)]"> <s:let name="scriptcodes" value="document('https://raw.githubusercontent.com/ParthenosWP4/standardsLibrary/master/ISO/ISO15924/ISO159242XML/ISO15924_TEI.xml')"/> <s:let name="code" value="normalize-space(@scriptcode)"/> <s:assert test="$scriptcodes//tei:f[@name='code']/tei:symbol/@value = $code " role="COULD"> The script or scriptcode attribute SHOULD contain a code from the ISO 15924 codelist. </s:assert> </s:rule>
The code should be taken from ISO 15924 Code for the Representation of Names of Scripts.

att.typed

att.typed provides attributes which can be used to classify or subclassify elements in any way.
Module EAD
Members *abstract accessrestrict altformavail container date descgrp dimensions extent genreform legalstatus materialspec note num odd originalsloc physfacet physloc phystech processinfo relatedmaterial separatedmaterial title titleproper unitid unittitle userestrict*
Attributes type characterizes the element in some sense, using any convenient classification scheme or typology.
Status Optional
Datatype

att.xlink

att.xlink Provides the definition of all XLink attributes needed for MLIF.NB : For the moment, all the linking attributes are in the same class (xlink attributes + XPOINTER + ENTITYREF + PARENT + TARGET)
Module EAD
Members *arc archref bibref dao daogrp daoloc extptr extptrloc extref extrefloc linkgrp ptr ref resource title*
Attributes label Labels the resource of locater element.

Status Optional
Datatype
Note XLink traversal attribute

href Supplies the data to find a remote resource.
Status Optional
Datatype
Note Specifies a document (URI) and an XPointer

type Indicates the XLink element type.
Status Optional
Legal values are: **simple**
Creates a simple link.
extended
Creates an extended link.
locator
Creates a locater link that points to a resource.
arc
Creates an arc with multiple resources and various traversal paths.
resource
Creates a resource link, which indicates a specific resource.
title
Creates a title link. Such elements are useful for internationalization purposes.

title Allows a human-readable description.
Status Optional
Datatype

from Identifies the origin resource of an arc.
Status Optional
Datatype
Note XLink transversal attribute

to Identifies the destination resource of an arc.
Status Optional
Datatype
Note XLink traversal attribute

role Identifies the type of the related resource with an absolute URI.
Status Optional
Datatype

actuate A control that defines whether a link occurs automatically or must be requested by the user. It is used in conjunction with the SHOW attribute to determine link behavior.
Status Optional
Datatype
Legal values are: **onLoad**

onRequest

other

none

show A control that defines whether a remote resource that is the target of a link

appears at the point of the link, replaces the existing link, or appears in a new window. It is used in conjunction with the ACTUATE attribute to determine link behavior.
Status Optional
Datatype
Legal values are: **new**

replace

embed

other

none

arcrole URL preference that identifies a resource that describes some property of an arc-type or simple-type linking element.
Status Optional
Datatype

xpointer The locator for a remote resource in a simple or locator link. The XPOINTER attribute takes the form of a Uniform Resource Identifier plus a reference, formulated in XPOINTER syntax, to a sub-resource of the remote resource. XPOINTER enables linking to specific sections of a document that are relative, i.e., based on their position in the document or their content, rather than by reference to a specific identifier such as an ID.
Status Optional
Datatype

entityref The name of a nonparsed entity declared in the declaration subset of the document that points to a machine-readable version of the cited reference.
Status Optional
Datatype

target A pointer to the ID of another element.
Status Optional
Datatype

parent A pointer to another container that holds the container item being described in the current element, e.g., points to the element that describes the box in which a folder is housed. Available in <container> and <physloc>
Status Optional
Datatype