



University of Texas Libraries

**University of Texas Libraries  
Human Rights Documentation Initiative  
Metadata Guidelines for Audio**

Version 1.1

September 2012

Changes made in version 1.1:

Changed geographic authority from *Geonames* to *Getty Thesaurus of Geographic Names* for Geographic Base and Geographic Focus elements.

## Table of Contents

Introduction .....	4
Purpose and Scope.....	4
Background .....	4
Acknowledgments.....	6
Using the Guidelines .....	7
Terminology .....	7
Conventions .....	7
UTAudio and METS .....	8
Structural Metadata.....	9
At-A-Glance Mandatory Elements .....	12
Descriptive Metadata.....	13
Source Metadata.....	29
Technical Metadata .....	38
Preservation Metadata .....	44
Appendices.....	48

# Introduction

## Purpose and Scope

The University of Texas Libraries' Human Rights Documentation Initiative (HRDI)<sup>1</sup> is committed to the long-term preservation of fragile and vulnerable records of human rights struggles worldwide, the promotion and secure usage of human rights archival materials, and the advancement of human rights research and advocacy around the world.

*The UT Libraries Human Rights Documentation Initiative Metadata Guidelines for Audio* provides guidelines for creating comprehensive metadata that will facilitate the discovery and preservation of fragile, born-digital audio documentation of human rights violations acquired through partnerships with human rights organizations worldwide.

This document aims to support the internal needs of the UT Libraries and also to guide and shape local descriptive metadata practices of our contributing partners. UT Libraries staff will work with contributing partners to transform any existing descriptive and source metadata; technical metadata and preservation metadata will be automatically generated by UT Libraries staff once copies of audio have been received by contributing partners. All of this metadata will be packaged at the digital object level and ingested into the Libraries' archive. See the *UTA Audio and METS* section on page 7 for more information on our digital object model.

This document is expected to be modified and refined over time to accommodate new requirements for describing and preserving born-digital audio.

## Background

In 2007, the University of Texas Libraries (UTL) co-sponsored with Columbia University Libraries and the Center for Research Libraries the conference "Human Rights Archives and Documentation: Meeting the Needs of Research, Teaching, Advocacy, and Social Justice<sup>2</sup>." The program brought together librarians and archivists from research universities with representatives from advocacy organizations around the world to grapple with the preservation and access issues related to the documentation of human rights violations. In the wake of the conference, the University of Texas Libraries established the Human Rights Documentation Initiative at the University of Texas at Austin with a generous grant from the Bridgeway Foundation<sup>3</sup> in 2008.

Working with activists, scholars, and organizations to identify electronic and analog resources that are particularly vulnerable to loss, the HRDI aims to preserve the most fragile records of human rights

---

<sup>1</sup> <http://lib.utexas.edu/hrdi/>

<sup>2</sup> [http://www.columbia.edu/cu/lweb/indiv/humanrights/news\\_events/2007/conference/index.html](http://www.columbia.edu/cu/lweb/indiv/humanrights/news_events/2007/conference/index.html)

<sup>3</sup> <http://www.bridgewayfoundation.org/>

struggles worldwide, promote the security and use of human rights archival materials, and further human rights research and advocacy around the world.

## **Acknowledgments**

The following individuals from the University of Texas Libraries participated in many meetings and discussions, making significant contributions to the development of this document:

Amy Rushing - Head of Digital Access Services

Summer Anderson - Graduate Research Assistant, UT School of Information (2009-2011)

Aaron Choate - Head of Technology Integration Services

Ladd Hanson - Head of Library Systems

Christian Kelleher - Archivist of the Benson Latin American Collection and Project Manager of the HRDI

Anna Lamphear - Audiovisual Digitization Coordinator

Jennifer Lee - Head of Preservation Services

T-Kay Sangwand - Human Rights Archivist

Kevin Wood - Senior Software Developer/Analyst

## Using the Guidelines

In following these guidelines, metadata contributors will be describing the original audio entity ("source object"), the digital surrogate of the original entity ("audio object"), and the files that comprise the audio object ("audio files") in various parts of the record.

## Terminology

These guidelines use a consistent descriptive terminology for the different aspects of audio metadata; they are defined as follows:

**Source Object:** The original physical or digital audio entity from which an audio object is created.

**Audio Object:** The digital surrogate of a source object. An audio object may be a single digital audio file or comprised of multiple digital audio files.

**Audio File(s):** A distinct audio file (*e.g.*, .wav, .wmv, .mp3) that makes up an audio object.

**Sequence:** The ordered parts of a distinct audio narrative, divided into sections as separate audio files.

## Conventions

Throughout the guidelines we indicate the following level of requirement for each element:

**M=Mandatory:** an element that is an absolute requirement. *Please see the "[At-A-Glance Mandatory Requirements](#)" on page 11 for a simple view of every mandatory element in this document.*

**R=Recommended:** an element that implementers may ignore, but only if they have fully weighed the implications of doing so.

**RA=Recommended if Applicable:** an element that is recommended if it is applicable to the object being described.

**O=Optional:** an element that implementers may use at their own discretion.

We have attempted to follow the same conventions for each metadata section; there are slight variations, specifically between the descriptive metadata section and the remaining metadata sections. The conventions are as follows:

**Name of Element:** Name of metadata element.

**Element Parts:** Lists the parts of element, if any.

**Definition:** Definition of element and element parts.

**Input Guidelines:** May include references to appropriate content standard, authority file, thesaurus, controlled vocabulary, etc. to guide data value entry. The **Note!** alert is used throughout the guidelines to draw attention to mandatory elements that may require special treatment.

**Repeatable:** Indicates whether an element and its parts may be repeated.

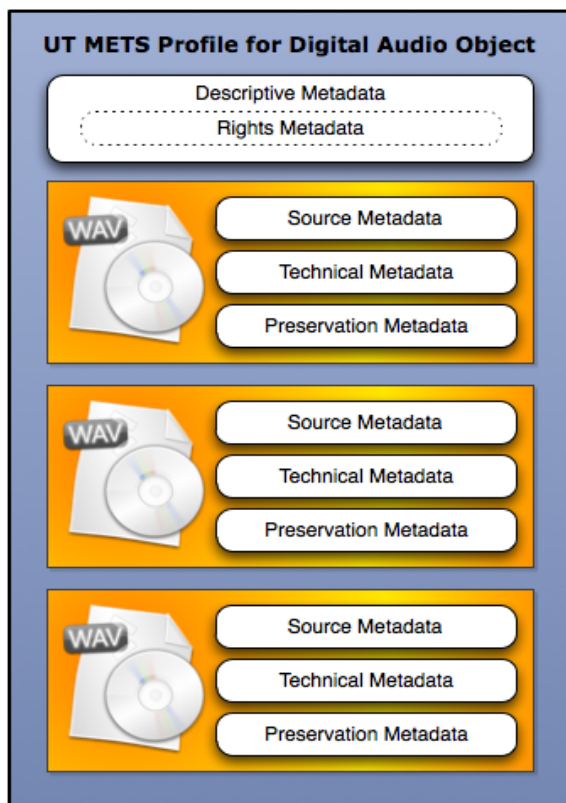
**Examples of Use and Mappings:** Provides examples of preferred data values within MODS and Dublin Core elements or other designated schema.

## UTAudio and METS

These guidelines are based on a data architecture which can be used in a METS-based or METS-compliant environment. METS<sup>4</sup>, the *Metadata Encoding and Transmission Standard*, is a metadata standard for encoding descriptive, administrative, and structural metadata regarding digital objects.

This document addresses the descriptive and administrative (source, technical, and preservation) metadata that will be used to build a METS package. METS packages used in the Human Rights Documentation Initiative conform to a METS application profile for audio developed by the UT Libraries, which is described in detail in the *UTAudio METS Profile*<sup>5</sup>.

The descriptive and administrative metadata outlined within this document uses a set of descriptive fields that can be mapped to MODS or Dublin Core, the audioMD schema for technical and source metadata, and PREMIS:event for preservation metadata. We define the descriptive and administrative metadata component in METS as follows:



**Descriptive metadata** – descriptive information about the audio object, such as names of people directly involved with creation of the object and the subject headings that could describe its contents, as well as the **rights** and any restrictions on access pertaining to the audio object.

**Source metadata** describes the physical characteristics of the source object from which the audio file(s) were created.

**Technical metadata** describes the digital characteristics of each audio file(s) created from the source object.

**Preservation metadata** records any actions taken where the audio object is modified.

<sup>4</sup> <http://www.loc.gov/standards/mets/>

<sup>5</sup> <http://www.loc.gov/standards/mets/profiles/00000037.xml>



## Structural Metadata

While these guidelines do not address the structural metadata component of METS, below is a brief explanation of the <fileSec> and <structMap> sections in the *UTAudio METS Profile*. This explanation does not attempt to cover everything needed to build a METS package. For more information about the specific rules and requirements, please refer to the *UTAudio METS Profile*.

### <fileSec>

In a METS document, the <fileSec> lists all the files which comprise an audio object. The <fileSec> section contains one or more <fileGrp> elements, which are used to group the individual audio files into sets based on the use of the audio file. The designation of a file's use or type is achieved by the USE attribute of the <fileGrp> element. In the *UTAudio METS Profile*, values of the USE attribute can be "raw," "master," and "derivative." The USE attribute of "raw" is for grouping the initial captured audio files. The USE attribute of "master" is for grouping the production master files and any supplemental files such as transcripts. The USE attribute "derivative" is for grouping compressed audio files. The basic structure of the file section looks like this:

```
<mets:fileSec>
  <mets:fileGrp USE="raw"></mets:fileGrp>
  <mets:fileGrp USE="master"></mets:fileGrp>
  <mets:fileGrp USE="derivative"></mets:fileGrp>
</mets:fileSec>
```

Within each <fileGrp> individual files must be listed within a <file> element and assigned a unique identifier with the FILEID attribute. Each <file> element must contain an <FLocat> element which specifies the external location of the audio file in an xlink:href attribute. A pointer to any metadata unique to the individual file should also be included at this level.

### <structMap>

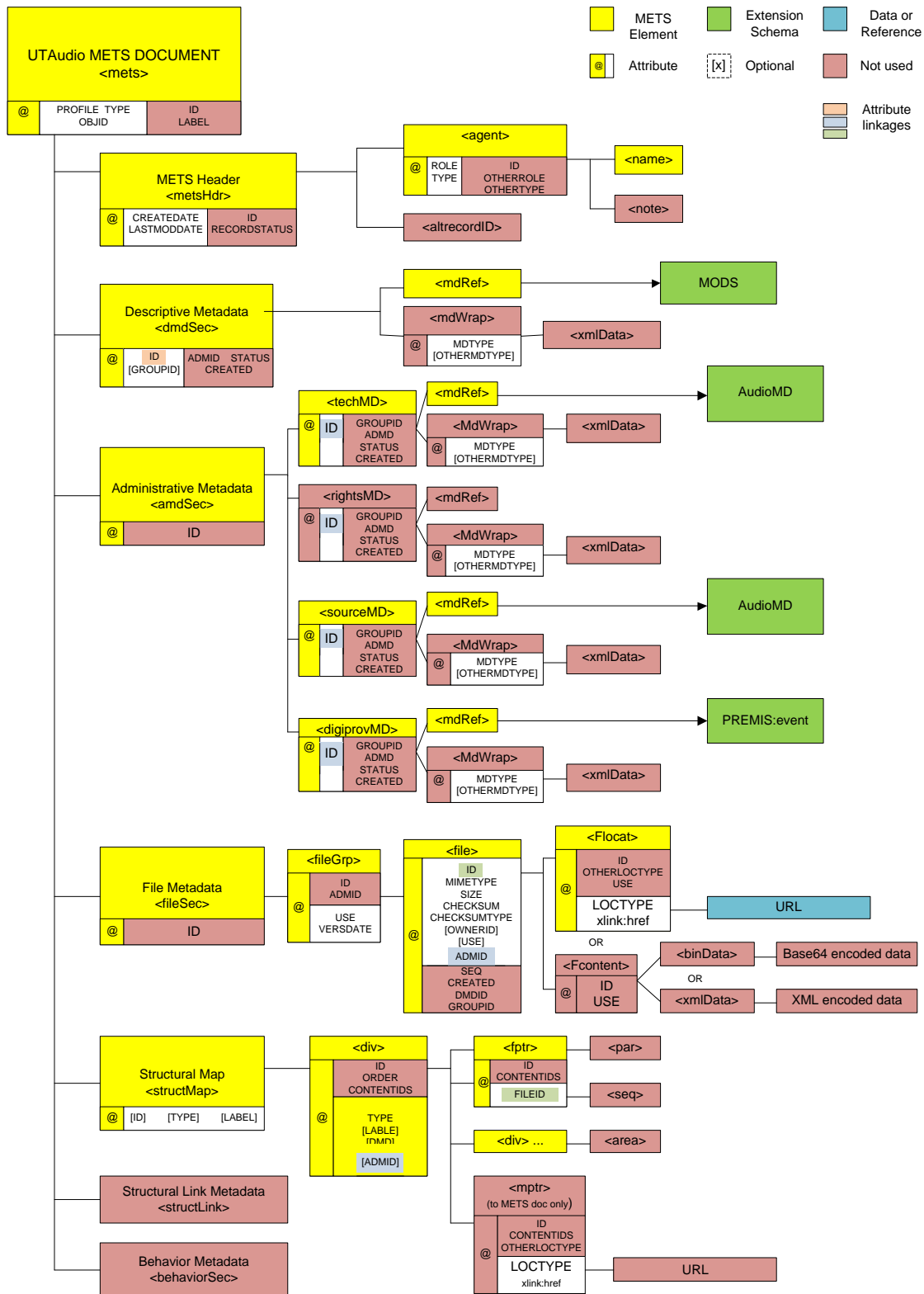
In the structural map section, using the <structMap> TYPE attribute, we indicate that the structure of the audio files is "logical." The structural divisions of the hierarchical organization in a <structMap> are represented by <div> elements, which can be nested to any depth. In *UTAudio METS* the structure is organized around the type of file and is designated through the TYPE attribute. These TYPES may be "audio" or "transcript." Within each TYPE div, another nested <div> specifies the order or sequence of the audio files. Every <div> node in the structural map hierarchy is connected to the audio files listed in the <fileSec> via <fptr> elements. The basic structure of a <structMap> section looks like this:

```
<mets:structMap TYPE="logical">
  <div>
    <div TYPE="audio">
      <div ORDER="1"><fptr/></div>
      <div ORDER="2"><fptr/></div>
    </div>
    <div>
      <div TYPE="transcript"><fptr/></div>
    </div>
  </div>
</mets:structMap>
```

The diagram on the following page represents<sup>6</sup> how the various METS components work in the *UTAudio METS Profile*:

---

<sup>6</sup> Adopted from the Australian Partnership for Sustainable Repositories' APSR-NLA METS Profile diagram. Original diagram drawn by Gerard Clifton. [http://www.apsr.edu.au/nla-mets/mets\\_profile\\_report.pdf](http://www.apsr.edu.au/nla-mets/mets_profile_report.pdf)



## **At-A-Glance Mandatory Elements**

### **Descriptive Metadata:**

Title  
Creator  
Date Created  
Topic  
Geographic Focus  
Type of Resource  
Identifier  
Rights

### **Source Metadata**

Bits per sample (sampling rate)  
Codec Creator Application  
Format Name  
Duration

### **Technical Metadata**

Bits per sample (sampling rate)  
Codec Creator Application  
Format Name  
Duration

### **Preservation Metadata**

Event Identifier  
Event Type  
Event Date/Time

## Descriptive Metadata

This section provides specifications for describing a digital audio object. The guidelines are structured according to a set of high-level descriptive elements. Although we intend for MODS<sup>7</sup> to be our primary descriptive metadata schema, the element names used here vary slightly from the MODS top-level elements for ease of use. We have mapped each element to MODS; mappings to Dublin Core have also been provided to accommodate systems that require Dublin Core. We recommend that metadata authors be familiar with the MODS schema in addition to the guidelines here. Please see [Appendix A](#) for a summary chart of the requirements and recommendations for descriptive metadata.

### **High-Level Descriptive Elements**

**Title (M)**

**Alternative Title (O)**

**Creator (M)**

**Contributor (O)**

**Publisher (R)**

**Date Created (M)**

**Language (R)**

**Abstract/Summary (O)**

**Physical Description/ Sequence (R)**

**Geographic Base (R)**

**Subjects (Topics, Named Entities, Geographic Focus, Geographic Region) (M)**

**Type of Resource (M)**

**Genre (O)**

**Table of Contents (O)**

**Note (O)**

**Identifier (M)**

**Location (RA)**

**Rights (M)**

---

<sup>7</sup> <http://www.loc.gov/standards/mods/>

## Title (M)

**Element Parts:** None

**Definition:** The title for the audio object assigned by the creator or owner, or a descriptive title assigned by Libraries staff.

**Input Guidelines:** The title of the audio recording can be transcribed from the original source object. It should be assigned when a title does not appear. Make the title as descriptive as possible, avoiding simple generic titles such as "Radio Show" or "Interview."

**Repeatable:** No. In cases where audio object has multiple titles (such as the same title in multiple languages) use the Alternative Title element.

### Mapping to MODS:

```
<mods:titleInfo lang="spa">
  <mods:title>Tejiendo la Memoria 11:Chiyo, un Niño de la
Guerra</mods:title>
</mods:titleInfo>
```

### Mapping to DC:

```
<dc.title>Tejiendo la Memoria 11:Chiyo, un Niño de la Guerra</dc.title>
```

---

## Alternative Title (O)

**Element parts:** None

**Definition:** Any form of the title used as a substitute or alternative to the title of the audio object, such as translation of title from another language, or a title with alternate spellings, omissions, abbreviations, or acronyms. If alternative title is title in another language, note the use of the *lang* attribute in the title element.

**Input Guidelines:** Enter varying form of the title if it contributes to the further identification of the item.

**Repeatable:** Yes

### Mapping to MODS:

```
<mods:titleInfo type="alternative" lang="eng">
  <mods:title>Weaving Memories 11: Chiyo, a Child of the War</mods:title>
</mods:titleInfo>
```

```
<dc.title.alternative>
  Weaving Memories 11: Chiyo, a Child of the War
</dc.title.alternative>
```

---

## Creator (M)

**Element parts:** *Creator Name, Display Form, Creator Type, Creator Affiliation, Creator Role*

**Definition:** *Creator Name* designates the name of person(s), institution, agent, or organization responsible for the creation of the audio object. *Creator Name* is mandatory. *Display Form* is used to indicate how a personal name should be displayed. *Creator Type* designates whether the creator is a person or organization. *Creator Role* designates the role of the creator. The *Role* "creator" is mandatory. *Creator Affiliation* designates the name of an organization the creator is associated with.

**Repeatable:** Yes. In cases where the audio object has multiple creators use a separate creator field for each creator name.

### Creator Name (M)

**Input Guidelines:** Enter the authorized form of the person or organization's name if possible. For personal names, enter the family and given name separately. Use *Display Form* to indicate when a personal name should be displayed in some other way than the default: GivenName FamilyName. **Note!** The creator's name is mandatory. If creator is unknown, do not leave element empty. Enter the value "unknown."

### Display Form (O)

**Input Guidelines:** Use this field to indicate how a personal name should be displayed (e.g. in reversed order rather than direct). The default display is GivenName FamilyName.

### Creator Type (R)

**Input Guidelines:** Enter "personal" or "corporate" to indicate whether the creator is a person or a company, institution, or other organization. The term "corporate" is used to encompass all types of companies and organizations (including non-profits and nongovernmental agencies), not just those belonging to a corporation.

### Creator Affiliation (O)

**Input Guidelines:** Enter the organization, institution, or group the creator was affiliated with at the time the resource was created. Use the official or authorized form of the organization's name.

### Creator Role (M)

**Input Guidelines:** **Note!** The role "creator" is mandatory. Entering additional roles of the creator is optional. Use *MARC Relators and Roles*<sup>8</sup> controlled vocabulary to enter additional roles. Terms from the controlled list that may be appropriate for audio recordings are terms like "reporter," "funder" or "producer."

---

<sup>8</sup> <http://www.loc.gov/marc/relators/relaterm.html>

**Note about pseudonyms, noms de guerre, nicknames, and aliases—**

In cases where a person's real name and pseudonym are known, please follow these guidelines: Nested within the <mods:name> element of the creator, enter the pseudonym in a separate <mods:namePart> element; indicate which name (real name, pseudonym, or both) should be displayed in the <mods:displayForm> element; and add the <mods:description> element to define the relationship between real name and pseudonym. **Note!** All pseudonyms should be entered with double quotation marks. \*Please see Real Name/Pseudonym example below. In cases where only a pseudonym is known, enter the pseudonym as you would any other name, with no <mods:description> element. \*See Pseudonym Only example below.

**Mapping to MODS:**

```
<mods:name type="corporate">
  <mods:namePart>Museo de la Palabra y la Imagen</mods:namePart>
  <mods:role>
    <mods:roleTerm>creator</mods:roleTerm>
    <mods:roleTerm>producer</mods:roleTerm>
  </mods:role>
</mods:name>
```

**Mapping to DC:**

```
<dc.creator>Museo de la Palabra y la Imagen</dc.creator>
```

**\*Real Name/Pseudonym example and Mapping to MODS:**

```
<mods:name type="personal">
  <mods:namePart type="family">Jones</mods:namePart>
  <mods:namePart type="given">John</mods:namePart>
  <mods:namePart>"Ranger"</mods:namePart>
  <mods:displayForm>John Jones "Ranger"</mods:displayForm>
  <mods:role>
    <mods:roleTerm>creator</mods:roleTerm>
    <mods:roleTerm>interviewer</mods:roleTerm>
  <mods:description>"Ranger" is nickname of John Jones.</mods:description>
  </mods:role>
</mods:name>
```

**\*Real Name/Pseudonym example and Mapping to DC:**

```
<dc.creator>John Jones</dc.creator>
<dc.creator>"Ranger"</dc.creator>
<dc.description>"Ranger" is nickname of John Jones.</dc.description>
```



### \*Pseudonym Only example and Mapping to MODS:

```
<mods:name type="personal">
  <mods:namePart>"Ranger"</mods:namePart>
  <mods:displayForm>"Ranger"</mods:displayForm>
  <mods:role>
    <mods:roleTerm>creator</mods:roleTerm>
    <mods:roleTerm>interviewer</mods:roleTerm>
  </mods:role>
</mods:name>
```

### \*Pseudonym Only example and Mapping to DC:

```
<dc.creator>"Ranger"</dc.creator>
```

---

## Contributor (O)

**Element parts:** *Contributor Name, Display Form, Contributor Type, Contributor Affiliation, Contributor Role*

**Definition:** *Contributor Name* designates the name of a person or organization that has played an important but secondary role in creating the content of the resource and is not specified in the Creator element. *Display Form* is used to indicate how a personal name should be displayed. *Contributor Type* designates whether the contributor is a person or organization. *Contributor Role* designates the role of the contributor. *Contributor Affiliation* designates the name of an organization the contributor is associated with.

**Repeatable:** Yes. In cases where audio object has multiple contributors, use a separate contributor field for each contributor name.

### Contributor Name (O)

**Input Guidelines:** Enter the authorized form of the person or organization's name if possible. For personal names, enter the family and given name separately. Use *Display Form* to indicate when a personal name should be displayed in some other way than the default: GivenName FamilyName.

### Display Form (O)

**Input Guidelines:** Use this field to indicate how a personal name should be displayed (e.g. in reversed order rather than direct). The default display is GivenName FamilyName.

### Contributor Type (O)

**Input Guidelines:** Enter "personal" or "corporate" to indicate whether the contributor is a person or a company, institution, or other organization. The term "corporate" is used to

encompass all types of companies and organizations (including non-profits and nongovernmental agencies), not just those belonging to a corporation.

### **Contributor Affiliation (O)**

**Input Guidelines:** Enter the organization, institution or group the contributor was affiliated with at the time the audio was created. Use the official or authorized form of the organization's name.

### **Contributor Role (MA)**

**Input Guidelines:** **Note!** If a contributor is listed, use the *Role* of "contributor." Entering additional roles of the contributor is optional. Use *MARC Relators and Roles*<sup>9</sup> controlled vocabulary to enter additional roles. Terms from the controlled list that may be appropriate for audio are terms like "interviewee," "reporter" or "producer."

### **Note about pseudonyms, noms de guerre, nicknames, and aliases—**

In cases where a person's real name and pseudonym are known, please follow these guidelines: Nested within the <mods:name> element of the contributor, enter the pseudonym in a separate <mods:namePart> element; indicate which name (real name, pseudonym, or both) should be displayed in the <mods:displayForm> element; and add <mods:description> element to define the relationship between real name and pseudonym. **Note!** All pseudonyms should be entered with double quotation marks. \*Please see Real Name/Pseudonym example below. In cases where only a pseudonym is known, enter the pseudonym as you would any other name, with no <mods:description> element. \*See Pseudonym Only example below.

### **Mapping to MODS:**

```
<mods:name type="personal">
  <mods:namePart type="family">Vásquez</mods:namePart>
  <mods:namePart type="given">Lucio</mods:namePart>
  <mods:role>
    <mods:roleTerm>contributor</mods:roleTerm>
    <mods:roleTerm>interviewee</mods:roleTerm>
  </mods:role>
</mods:name>
```

### **Mapping to DC:**

```
<dc.contributor>Lucio Vásquez</dc.contributor>
```

### **Real Name/Pseudonym Example and Mapping to MODS:**

---

<sup>9</sup> <http://www.loc.gov/marc/relators/relaterm.html>

```

<mods:name type="personal">
  <mods:namePart type="family">Vásquez</mods:namePart>
  <mods:namePart type="given">Lucio</mods:namePart>
  <mods:namePart>"Chiyo"</mods:namePart>
  <mods:displayForm>"Chiyo"</mods:displayForm>
  <mods:role>
    <mods:roleTerm>contributor</mods:roleTerm>
    <mods:roleTerm>interviewee</mods:roleTerm>
  </mods:role>
  <mods:description>"Chiyo" is nickname of Lucio Vásquez.</mods:description>
</mods:name>

```

### Real Name/Pseudonym Example and Mapping to DC:

```

<dc.contributor>Lucio Vásquez</dc.contributor>
<dc.contributor>"Chiyo"</dc.contributor>
<dc.description>"Chiyo" is nickname of Lucio Vásquez.</dc.description>

```

### \*Pseudonym Only example and Mapping to MODS:

```

<mods:name type="personal">
  <mods:namePart>"Chiyo"</mods:namePart>
  <mods:displayForm>"Chiyo"</mods:displayForm>
  <mods:role>
    <mods:roleTerm>contributor</mods:roleTerm>
    <mods:roleTerm>interviewee</mods:roleTerm>
  </mods:role>
</mods:name>

```

### \*Pseudonym Only example and Mapping to DC:

```

<dc.contributor>"Chiyo"</dc.contributor>

```

## Publisher (R)

**Element parts:** None

**Definition:** The entity responsible for making the audio object available.

**Input Guidelines:** Expressed in the authorized form of the publisher's name if possible.

**Repeatable:** Yes. In the case of multiple publishers, use a separate publisher field for each publisher.

### Mapping to MODS:

```

<mods:originInfo>
  <mods:publisher>Museo de la Palabra y la Imagen</mods:publisher>
  <mods:publisher>University of Texas Libraries</mods:publisher>

```

```
</mods:originInfo>
```

**Mapping to DC:**

```
<dc:publisher>Museo de la Palabra y la Imagen</dc:publisher>  
<dc:publisher>University of Texas Libraries</dc:publisher>
```

---

## Date Created (M)

**Element parts:** None

**Definition:** The date or date range of creation of the audio recording.

**Input Guidelines:** As specified by *ISO 8601*<sup>10</sup>, enter date as Year-Month-Day, separating the sections with a single hyphen (e.g. YYYY-MM-DD). Include partial dates only if the year or only the month and year are known (e.g. YYYY or YYYY-MM). For date ranges, follow the same basic format but separate the dates with a slash mark (e.g. YYYY-MM-DD/YYYY-MM-DD or YYYY/YYYY). For circa dates, follow the ISO format but add the word "circa" in front (e.g. circa YYYY or circa YYYY-MM or circa YYYY/YYYY) **Note!** The date element is mandatory. If date is unknown do not leave field blank; use the term "undated."

**Repeatable:** No

**Mapping to MODS:**

```
<mods:originInfo>  
  <mods:dateCreated encoding="iso8601">  
    2007-02-07  
  </mods:dateCreated>  
</mods:originInfo>
```

**Mapping to DC:**

```
<dc.date.created>2007-02-07</dc.date.created>
```

---

## Language (R)

**Element parts:** None

**Definition:** The spoken language(s) on the audio recording.

**Input Guidelines:** Use the three-letter *ISO 639-3*<sup>11</sup> code for the representation of the name of the language(s).

---

<sup>10</sup> [http://www.iso.org/iso/iso\\_catalogue/catalogue\\_tc/catalogue\\_detail.htm?csnumber=40874](http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40874)

<sup>11</sup> <http://www.sil.org/iso639-3/codes.asp>

**Repeatable:** Yes. In cases where more than one language is spoken on the audio object, use a separate language field for each language.

**Mapping to MODS:**

```
<mods:language>
  <mods:languageTerm type="code" authority="iso639-3">
    spa
  </mods:languageTerm>
</mods:language>
```

**Mapping to DC:**

```
<dc.language.iso>spa</dc.language.iso>
```

---

## Abstract/Summary (O)

**Element Parts:** None

**Definition:** A summary of the contents of the audio recording.

**Input Guidelines:** Describe the subject matter of the audio object. Use complete sentences with proper grammar and punctuation. Avoid any commentary on or interpretation of the audio recording being described.

**Repeatable:** No

**Mapping to MODS:**

```
<mods:abstract>In this episode of "Weaving Memories 11: Chiyo, a Child of the War," Lucio Vásquez, known as Chiyo, speaks about his experience during the civil war in El Salvador (1980-1992) and his perspective of the postwar period. He speaks about the deaths of his family members, living with the guerrilla army, and his life in Mexico and El Salvador after the war. The episode concludes with "100 Feet," a song composed, played, and sung by Chiyo.</mods:abstract>
```

**Mapping to DC:**

```
<dc.description.abstract>In this episode of "Weaving Memories 11: Chiyo, a Child of the War," Lucio Vásquez, known as Chiyo, speaks about his experience during the civil war in El Salvador (1980-1992) and his perspective of the postwar period. He speaks about the deaths of his family members, living with the guerrilla army, and his life in Mexico and El Salvador after the war. The episode concludes with "100 Feet," a song composed, played, and sung by Chiyo.</dc.description.abstract>
```

---

## Physical Description/ Sequence (R)

**Element parts:** *Extent, Note*

**Definition:** *Extent* is the total number of sequences associated with the audio object. *Note* is a textual statement about the audio sequence.

**Repeatable:** No

### Extent

**Input Guidelines:** Enter the total number of sequences associated with the audio object.

### Note

**Input Guidelines:** Enter a textual statement about the number of sequences comprising the audio object.

### Mapping to MODS:

```
<mods:physicalDescription>
  <mods:extent>1</mods:extent>
  <mods:note>
    This radio program consists of one segment, 7 minutes 12 seconds
    long.
  </mods:note>
</mods:physicalDescription>
```

### Mapping to DC:

```
<dc.format.extent>1</dc.format.extent>
<dc.format.note>
  This radio program consists of one segment, 7 minutes 12 seconds long.
</dc.format.note>
```

---

## Geographic Base (R)

**Element parts:** None

**Definition:** The geographic location of entity responsible for making the audio object.

**Input Guidelines:** Begin with the largest (e.g. "continent" level) and proceed to the smallest relevant geographical unit, separating each term with two dashes (e.g. "--"). Use *Getty Thesaurus of Geographic Names*<sup>12</sup> as authority.

---

<sup>12</sup> <http://www.getty.edu/research/tools/vocabularies/tgn/index.html>

**Repeatable:** Yes. In cases where organization is based in more than one location, enter each location string in a separate field.

**Mapping to MODS:**

```
<mods:originInfo>
  <mods:place authority="tgn">
    North and Central America--El Salvador
  </mods:place>
</mods:originInfo>
```

**Mapping to DC:**

```
<dc.coverage.geographicBase>
  North and Central America--El Salvador
</dc.coverage.geographicBase>
```

---

## Subjects (Topics, Named Entities, Geographic Focus, Geographic Region) (M)

**Element Parts:** *Topic, Named Entities, Geographic Focus, Geographic Region*

**Definition:** *Topic* is a term or phrase representing the primary topic(s) of the audio recording. *Named Entities* refers to people or organizations that are significant in some way to the content of the recording. *Geographic Focus* refers to the geographic place(s) covered in the audio object. *Geographic Region* refers to the broad geographic area on which the content of the audio object focuses. **Note!** At least one *Topic* and at least one *Geographic Focus* must be assigned.

**Repeatable:** Yes. All element parts are repeatable.

### Topics (M)

**Input Guidelines:** Choose appropriate topic(s) from the *Human Rights Documentation Initiative Thesaurus*<sup>13</sup>. Must choose at least one topic, but more than one can be assigned. Enter the full hierarchy of the topic, separating each term with two dashes (e.g. "--").

### Named Entities (O)

**Input Guidelines:** Enter names of people or organizations that are significant in some way to the audio object.

### Geographic Focus (M)

---

<sup>13</sup> placeholder

**Input Guidelines:** Begin with the largest (e.g. "continent" level) and proceed to the smallest relevant geographical unit, separating each term with two dashes (e.g. "--"). Use *Getty Thesaurus of Geographic Names* as authority.

### **Geographic Region (R)**

**Input Guidelines:** Enter the continent name or general region name as listed in the *Getty Thesaurus of Geographic Names*.

### **Mapping to MODS:**

```
<mods:subject>
  <mods:topic authority="hrdi">
    armed conflict and persecution--insurgency
  </mods:topic>
  <mods:topic authority="hrdi">
    economic, social, and cultural rights--social and cultural
    rights--national identity
  </mods:topic>
  <mods:geographic authority="tgn">
    North and Central America--El Salvador
  </mods:geographic>
  <mods:geographic authority="tgn">
    North and Central America--Mexico
  </mods:geographic>
  <mods:geographic authority="tgn">
    North and Central America
  </mods:geographic>
  <mods:geographic authority="tgn">
    Latin America
  </mods:geographic>
</mods:subject>
```

### **Mapping to DC:**

```
<dc.subject.hrdi>armed conflict and persecution--insurgency</dc.subject.hrdi>
<dc.subject.hrdi>economic, social, and cultural rights--social and cultural
rights--national identity</dc.subject.hrdi>
<dc.subject.tgn>North and Central America--El Salvador<dc.subject.geonames>
<dc.subject.tgn>North and Central America--Mexico<dc.subject.geonames>
<dc.subject.tgn>North and Central America<dc.subject.tgn>
<dc.subject.tgn>Latin America<dc.subject.tgn>
```

---



## Type of Resource (M)

**Element Parts:** None

**Definition:** The broad, high-level term that categorizes the type of material being described (such as text, still image, moving image, etc).

**Input Guidelines:** Use the term "sound" from the *UT Libraries' Type Vocabulary* found in [Appendix B](#).

**Repeatable:** No

### Mapping to MODS:

```
<mods:typeOfResource authority="uttype">sound</mods:typeOfResource>
```

### Mapping to DC:

```
<dc.type>sound</dc.type>
```

---

## Genre (O)

**Element parts:** None

**Definition:** Characterizes the content of the audio object.

**Input Guidelines:** Use term(s) from the *Library of Congress Recorded Genre Term*<sup>14</sup> or the *MARC Genre Term List*<sup>15</sup>

**Repeatable:** Yes. Repeat element if audio falls into more than one genre term.

### Mapping to MODS:

```
<mods:genre authority="lcrgt">radio</mods:genre>  
<mods:genre authority="lcrgt">biographies</mods:genre>  
<mods:genre authority="marcgt">interview</mods:genre>
```

### Mapping to DC:

```
<dc.type.genre>radio</dc.type.genre>  
<dc.type.genre>biographies</dc.type.genre>  
<dc.type.genre>interview</dc.type.genre>
```

---

## Table of contents (O)

**Element Parts:** None

---

<sup>14</sup> <http://www.loc.gov/rr/record/terms.html>

<sup>15</sup> <http://www.loc.gov/standards/valuelist/marcgt.html>

**Definition:** A detailed and structured description of the contents of the audio object.

**Input Guidelines:** Describe the contents or sequence of the audio object.

**Repeatable:** No

**Mapping to MODS:**

```
<mods:tableOfContents>This program contains an introduction, a brief biography of Chiyo, his experiences during and after the war and an original song, sung by Chiyo.</mods:tableOfContents>
```

**Mapping to DC:**

```
<dc.description.tableOfContents>This program contains an introduction, a brief biography of Chiyo, his experiences during and after the war and an original song, sung by Chiyo.</dc.description.tableOfContents>
```

## Note (O)

**Element Parts:** None

**Definition:** Any information relating to the audio that cannot be entered in other elements, such as collection name, project name, administrative information, or information to assist with the management of the object.

**Input Guidelines:** Use proper grammar and punctuation.

**Repeatable:** Yes

**Mapping to MODS:**

```
<mods:note>Originally broadcast by the Association of Participatory Radio and Programs of El Salvador (ARPAS).</mods:note>
```

**Mapping to DC:**

```
<dc.description.note>Originally broadcast by the Association of Participatory Radio and Programs of El Salvador (ARPAS).</dc.description.note>
```

## Identifier (M)

**Element Parts:** None

**Definition:** Any unique standard number(s) or code(s) that distinctively identifies the audio object.

**Input Guidelines:** Enter the root file name of the audio object and/ or other unique number(s).

**Repeatable:** Yes

**Mapping to MODS:**

```
<mods:identifier>tlm00011</mods:identifier>  
<mods:identifier>mupi5544</mods:identifier>
```

**Mapping to DC:**

```
<dc:identifier>tlm00011</dc:identifier>  
<dc:identifier>mupi5544</dc:identifier>
```

---

**Location (RA)**

**Element Parts:** None

**Definition:** Identifies location of sound object in archival repository.

**Input Guidelines:** System supplied handle or URL.

**Repeatable:** Yes

**Mapping to MODS:**

```
<mods:location>  
  <mods:url>https://archive.lib.utexas.edu/mupi/tlm00011</mods:url>  
</mods:location>
```

**Mapping to DC:**

```
<dc:identifier.url>  
  https://archive.lib.utexas.edu/mupi/tlm00011  
</dc:identifier.url>
```

---

**Rights (M)**

**Element Parts:** *Rights Type, Rights Information*

**Definition:** Information about rights relating to access and use of audio object. *Rights Type* designates the "restriction on access" and the terms of "use and reproduction." *Rights Information* designates whether audio object can be made public, or whether it must remain private, or whether there are restrictions on parts of the content.

**Repeatable:** Yes

**Rights Type (M)**

**Input Guidelines:** There are two types of information that must be documented in the *Rights Information* section: "restriction on access" and "use and reproduction."

### **Rights Information (M)**

**Input Guidelines:** When entering "restriction on access" information, enter one of three values: "public," "private," or "restricted."

public=access is open or there are no restrictions.

private=access is restricted to content holders and/or their designees, and digital archive administrators.

restricted=content or parts of content is restricted and the conditions of the restriction is documented in the "use and reproduction" section.

"Use and reproduction" information should be entered to document the terms and conditions of the "restriction on access." If "restriction on access" is "public", enter this statement: "This electronic resource is made available by the University of Texas Libraries solely for the purposes of research, teaching and private study. All intellectual property rights are retained by the legal copyright holders. The University of Texas does not hold the copyright to the content of this file. Formal permission to reuse or republish this content must be obtained from the copyright holder."

If "restriction on access" is "restricted," enter the conditions of the restriction.

### **Mapping to MODS:**

```
<mods:accessCondition type="restriction on access">
  public
</mods:accessCondition>
<mods:accessCondition type="use and reproduction">This electronic resource is
made available by the University of Texas Libraries solely for the purposes
of research, teaching and private study. All intellectual property rights are
retained by the legal copyright holders. The University of Texas does not
hold the copyright to the content of this file. Formal permission to reuse or
republish this content must be obtained from the copyright
holder.</mods:accessCondition>
```

### **Mapping to DC:**

```
<dc.rights.restriction>public</dc.rights.restriction>
<dc.rights>This electronic resource is made available by the University of
Texas Libraries solely for the purposes of research, teaching and private
study. All intellectual property rights are retained by the legal copyright
holders. The University of Texas does not hold the copyright to the content
of this file. Formal permission to reuse or republish this content must be
obtained from the copyright holder.</dc.rights>
```

## Source Metadata

Source Metadata describes the original audio (source object) from which the digital audio file(s) were created. The source object is described mostly in terms of the source object's physical characteristics. Outlined below are elements from *audioMD*<sup>16</sup>, the Library of Congress schema for capturing source metadata. A full example of use has been provided at the end of the Source Metadata section. Please see [Appendix C](#) for a summary chart of the requirements and recommendations for source metadata.

### **High-Level Source Elements**

**Audio Source (M)**

**Audio Type (M)**

**Physical Data (R)**

**Audio Info (M)**

---

<sup>16</sup> <http://www.loc.gov/standards/amdvmd/audioMD.xsd>

---

## Audio Source (M)

**Element Name:** AUDIOSRC

**Element Parts:** None

**Definition:** A wrapper element describing the source of the audio object. Use the ANALOGDIGITALFLAG attribute to specify the type of source item being described. Attribute value must be one of these: "Analog," "PhysDigital," or "FileDigital."

**Element Attributes:** ID, ANALOGDIGITALFLAG

---

## Audio Type (M)

**Element Name:** audioType

**Element Parts:** *File data, Physical Data, Audio Info*

**Definition:** A container element for encapsulating and organizing within a single parent element the individual audio metadata elements that describe an audio object.

### File Data (M)

**Element Name:** fileData

**Element Parts:** *Audio Block Size, Audio Data Encoding, Bits Per Sample, Byte Order, Compression, Data Rate, Data Rate Mode, First Sample Offset, First Valid Byte Block, Format Name, Format Note, Format Version, Last Valid Byte Block, Number Sample Frames, Sampling Frequency, Word Size*

**Definition:** Container element for describing the technical characteristics of a source digital audio file.

### Audio Block Size (R)

**Element Name:** audioBlockSize

**Definition:** The size of the audio block (frame or sample) in bytes.

**Input Guidelines:** Value must be a positive integer.

### Audio Data Encoding (R)

**Element Name:** audioDataEncoding

**Definition:** The encoding scheme of the audio data.

**Input Guidelines:** Free text; e.g. "pulse code modulation (PCM)."

### Bits Per Sample (Sampling Rate) (M)

**Element Name:** bitsPerSample

**Definition:** The size of a single digital audio sample in bits.

**Input Guidelines:** Value must be a positive integer; e.g., 16, 20, 24, etc.

#### **Byte Order (R)**

**Element Name:** byteOrder

**Definition:** The order of bit significance in a byte from left to right.

**Input Guidelines:** Use the value "0" to signify least-to-most byte order; use the value "1" to signify most-to-least byte order.

#### **Compression (M)**

**Element Name:** compressionType

**Element Parts:** *Codec Creator Application, Codec Creator Application Version, Codec Name, Codec Quality*

**Definition:** Parent element for recording the type of compression used for a digital audio file.

**Element Attributes:** ID

##### **Codec Creator Application (M)**

**Element Name:** codecCreatorApp

**Definition:** The name of the creator of the compression application.

**Input Guidelines:** Free text; e.g. "SoundForge" or "NVidia."

##### **Codec Creator Application Version (O)**

**Element Name:** codecCreatorAppVersion

**Definition:** The version of the compression application

**Input Guidelines:** Free text.

##### **Codec Name (O)**

**Element Name:** codecName

**Definition:** The name of the compression application used

**Input Guidelines:** Free text; e.g. "Fraunhofer" or "Huffman."

##### **Codec Quality (O)**

**Element Name:** codecQuality

**Definition:** Impact of the compression on quality

**Input Guidelines:** Value must be "lossy" or "lossless."

**Data Rate (R)**

**Element Name:** dataRate

**Definition:** The bit rate of the digital audio file, expressed in kbps.

**Input Guidelines:** Value must be positive integer; e.g. 64, 128, 256, etc.

**Data Rate Mode (R)**

**Element Name:** dataRateMode

**Definition:** Describes the rate at which a codec's output data should be read.

**Input Guidelines:** Value must be "Fixed" or "Variable."

**Format Name (M)**

**Element Name:** formatName

**Definition:** The official name of the file format as taken from the format documentation.

**Input Guidelines:** Free text.

**Format Note (O)**

**Element Name:** formatNote

**Definition:** A textual statement to record application specific information about the audio file.

**Input Guidelines:** Free text; e.g. "SoundForge 5.0" or "WaveLab 3.0."

**Format Version (O)**

**Element Name:** formatVersion

**Definition:** The version of the audio format specified in the <formatName> element.

**Input Guidelines:** Free text.

---

**Physical Data (R)**

**Element Name:** physicalData

**Element Parts:** *Condition, Dimensions, Material, Noise Reduction, Physical Format, Speed, Speed Adjustment, Speed Note, Track Format, Tracking, Note*

**Definition:** A container element for elements that describe the physical nature of an audio object if it exists as such (i.e. it is not a file). This will generally apply to analog items but may also be used to describe digital formats such as open reel digital, DAT, ADAT tape, CD-R, etc.



**Condition (R)**

**Element Name:** condition

**Definition:** The physical condition of the audio item.

**Input Guidelines:** The possible values for this element are: "good," "acceptable," "poor," or "un-usable." "good"=image and sound are both good quality. "acceptable"=some issues but still usable. "poor"=integral issues, including but not limited to scratches, warping, etc. "un-usable"=source is unable to be transferred.

**Material Type (R)**

**Element Name:** material

**Element Parts:** *Stock Brand, Used Sides*

**Definition:** Contains information about the physical characteristics and the construction of the source audio

**Element Attributes:** ID

**Stock Brand (R)**

**Element Name:** stockBrand

**Definition:** The name of the manufacturer of the recording medium of the source audio object.

**Input Guidelines:** Use the official name of the manufacturer when possible; e.g. "Sony" or "Maxwell."

**Used Sides (R)**

**Element Name:** usedSides

**Definition:** The number of recorded sides of the source audio object.

**Input Guidelines:** Value must be a positive integer.

**Noise Reduction (R)**

**Element Name:** noiseReduction

**Definition:** The type of noise reduction used in the audio source item, if any.

**Input Guidelines:** Free text; e.g., DA (Dolby A), DB (Dolby S), FL (Flat) etc.

**Physical Format (R)**

**Element Name:** physFormat

**Definition:** The physical format of the audio source item.

**Input Guidelines:** Free text; e.g. "1/4 inch cassette" or "reel-to-reel."

**Speed (R)**

**Element Name:** speed

**Definition:** The nominal playback speed of an audio item, including indication of the unit of measure.

**Input Guidelines:** Free text; e.g. 1 7/8 ips, 4.75 cm/s, 15 ips, 78 rpm, 45 rpm, etc.

**Speed Note (O)**

**Element Name:** speedNote

**Definition:** Any additional textual information about the speed of the source audio.

**Input Guidelines:** Free text.

**Track Format (O)**

**Element Name:** trackFormat

**Definition:** The track format of the source audio.

**Input Guidelines:** Free text; e.g. "8-track" or "3-track."

**Tracking Info (R)**

**Element Name:** tracking

**Element Parts:** Tracking Type, Tracking Value

**Definition:** Parent element for tracking information about the source audio.

**Element attributes:** ID

**Tracking Type (R)**

**Element Name:** trackingType

**Definition:** The type of tracking code used in the source audio.

**Input Guidelines:** Free text; e.g. "bar-code" or "shelf number."

**Tracking Value (R)**

**Element Name:** trackingValue

**Definition:** The barcode or other actual value as specified by the "Tracking Type" element.

**Input Guidelines:** Free text.

**Note (R)**

**Element Name:** note

**Definition:** Element for recording information about the tracking number, such as location of tracking number on physical object, i.e. on the containing box, or from a label on the cassette.

**Input Guidelines:** Free text.

---

## Audio Info (M)

**Element Name:** audiInfo

**Element Parts:** *Duration, Note, Number Channels, Sound Channel Map Type, Sound Field*

**Definition:** A container element for describing general characteristics of the source object.

**Element Attributes:** ID

### Duration (M)

**Element Name:** duration

**Definition:** The elapsed time of the entire source audio.

**Input Guidelines:** Express duration as specified in *ISO 8601*<sup>17</sup>.

### Note (O)

**Element Name:** note

**Definition:** Any additional textual information about the source audio.

**Input Guidelines:** Free text.

### Number Channels (R)

**Element Name:** numChannels

**Definition:** The number of audio channels in the source audio.

**Input Guidelines:** Value must be a positive integer.

### Sound Channel Map (O)

**Element Name:** soundChannelMap

**Element Parts:** *Channel Assignment*

**Definition:** Parent element used to wrap any number of Channel Assignment elements. This structure is used to describe the relationship of sound channels to their destination (e.g. location on sound stage or channels of a mixing board).

---

<sup>17</sup> [http://www.iso.org/iso/iso\\_catalogue/catalogue\\_tc/catalogue\\_detail.htm?csnumber=40874](http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40874)

### **Channel Assignment (O)**

**Element Name:** channelAssignment

**Definition:** Maps a sound channel to its destination.

**Input Guidelines:** Each use of the channel assignment element will have a required attribute. ChannelNum identifies the sound channel of the audio object. The first ChannelNum will be 0 and is incremented by 1.

**Element Attributes:** ChannelNum

### **Sound Field (R)**

**Element Name:** soundField

**Definition:** The aural space of the digital audio item.

**Input Guidelines:** Free text; e.g. "stereo" or "surround sound."

### **Full Example of Use:**

```
<AUDIOSRC ANALOGDIGITALFLAG="PhysDigital">
<fileData>
  <audioBlockSize>1024</audioBlockSize>
  <audioDataEncoding>pulse code modulation (PCM)</audioDataEncoding>
  <bitsPerSample>16</bitsPerSample>
  <byteOrder>0</byteOrder>
  <compression>
    <codecCreatorApp>SoundForge</codecCreatorApp>
    <codecCreatorAppVersion>5.0</codecCreatorAppVersion>
    <codecName>Frauenhofer</codecName>
    <codecQuality>lossless</codecQuality>
  </compression>
  <dataRate>64</dataRate>
  <dataRateMode>Fixed</dataRateMode>
  <formatName>Broadcast Wave Format</formatName>
  <formatNote>SoundForge 5.0</formatNote>
  <formatVersion>3.0</formatVersion>
</fileData>
<physicalData>
  <condition>good</condition>
  <material>
    <stockBrand>Sony</stockBrand>
    <usedSides>2</usedSides>
  </material>
  <noiseReduction>DA (Dolby A)</noiseReduction>
  <physFormat>1/4 inch cassette</physFormat>
</physicalData>
</AUDIOSRC>
```

```
<speed>4.75 cm/s</speed>
<speedNote>corrected breaks in speed</speedNote>
<trackFormat>3-track</trackFormat>
<tracking>
  <trackingType>shelf number</trackingType>
  <trackingValue>215122</trackingValue>
</tracking>
  <note>tracking number on cassette label.</note>
</physicalData>
<audioInfo>
  <duration>00:29:12</duration>
  <numChannels>2</numChannels>
  <soundChannelMap>
    <channelAssignment CHANNELNUM="1">left</channelAssignment>
    <channelAssignment CHANNELNUM="2">right</channelAssignment>
  </soundChannelMap>
  <soundField>stereo</soundField>
</audioInfo>
</AUDIOSRC>
```

## Technical Metadata

This section provides specifications for capturing technical metadata on each raw and production master digital audio file that comprises an audio object. Technical metadata is extracted using *MediaInfo*<sup>18</sup> and automatically transformed to conform to the *audioMD*<sup>19</sup> schema from the Library of Congress. Outlined below are select elements from *audioMD* that we are most concerned with capturing. A full example of use has been provided at the end of the Technical Metadata section. Please see [Appendix D](#) for a summary chart of the requirements and recommendations for technical metadata.

### **High-Level Technical Elements**

#### **Audio Metadata (M)**

#### **Audio Type (M)**

#### **Audio Info (M)**

---

<sup>18</sup> <http://mediainfo.sourceforge.net/en>

<sup>19</sup> <http://www.loc.gov/standards/amdvmd/audioMD.xsd>

## Audio Metadata (M)

**Element Name:** AUDIOMD

**Definition:** A wrapper element describing the digital file(s) of the audio object. Use the ANALOGDIGITALFLAG attribute to specify the type of audio file being described. Attribute value must be "FileDigital."

**Element Attributes:** ANALOGDIGITALFLAG

---

## Audio Type (M)

**Element Name:** audioType

**Element Parts:** *File Data, Audio Info*

**Definition:** A container element for encapsulating and organizing within a single parent element the individual audio metadata elements that describe an audio object.

### File Data (M)

**Element Name:** fileData

**Element Parts:** *Audio Block Size, Audio Data Encoding, Bits Per Sample, Byte Order, Compression, Data Rate, Data Rate Mode, First Sample Offset, First Valid Byte Block, Format Name, Format Note, Format Version, Last Valid Byte Block, Number Sample Frames, Sampling Frequency, Word Size*

**Definition:** Container element for describing the technical characteristics of a digital audio file.

### Audio Block Size (R)

**Element Name:** audioBlockSize

**Definition:** The size of the audio block (frame or sample) in bytes.

**Input Guidelines:** Value must be a positive integer.

### Audio Data Encoding (R)

**Element Name:** audioDataEncoding

**Definition:** The encoding scheme of the audio data.

**Input Guidelines:** Free text; e.g. "pulse code modulation (PCM)."

### Bits Per Sample (Sampling Rate) (M)

**Element Name:** bitsPerSample

**Definition:** The size of a single digital audio sample in bits.

**Input Guidelines:** Value must be a positive integer; e.g. 16, 20, 24, etc.

#### **Byte Order (R)**

**Element Name:** byteOrder

**Definition:** The order of bit significance in a byte from left to right.

**Input Guidelines:** Use the value "0" to signify least-to-most byte order; use the value "1" to signify most-to-least byte order.

#### **Compression (M)**

**Element Name:** compression

**Element Parts:** *Codec Creator Application, Codec Creator Application Version, Codec Name, Codec Quality*

**Definition:** Parent element for recording the type of compression used for a digital audio file.

**Element Attributes:** ID

##### **Codec Creator Application (M)**

**Element Name:** codecCreatorApp

**Definition:** The name of the creator of the compression application.

**Input Guidelines:** Free text; e.g. "SoundForge" or "NVidia."

##### **Codec Creator Application Version (O)**

**Element Name:** codecCreatorAppVersion

**Definition:** The version of the compression application.

**Input Guidelines:** Free text.

##### **Codec Name (O)**

**Element Name:** codecName

**Definition:** The name of the compression application used.

**Input Guidelines:** Free text; e.g. "Fraunhofer" or "Huffman."

##### **Codec Quality (O)**

**Element Name:** codecQuality

**Definition:** Impact of the compression on quality.

**Input Guidelines:** Value should be "lossy" or "lossless."



**Data Rate (R)**

**Element Name:** dataRate

**Definition:** The bit rate of the digital audio file.

**Input Guidelines:** Value must be positive integer; e.g. 64, 128, 256, etc.

**Data Rate Mode (R)**

**Element Name:** dataRateMode

**Definition:** Describes the rate at which a codec's output data should be read.

**Input Guidelines:** Value must be "Fixed" or "Variable."

**Format Name (M)**

**Element Name:** formatName

**Definition:** The official name of the file format as taken from the format documentation.

**Input Guidelines:** Free text.

**Format Note (O)**

**Element Name:** formatNote

**Definition:** A textual statement to record application specific information about the audio file.

**Input Guidelines:** Free text; e.g. "SoundForge 5.0" or "WaveLab 3.0."

**Format Version (O)**

**Element Name:** formatVersion

**Definition:** The version of the audio format specified in the <formatName> element.

**Input Guidelines:** Free text.

**Audio Info (M)**

**Element Name:** audiInfo

**Element Parts:** *Duration, Note, Number Channels, Sound Channel Map Type, Sound Field*

**Definition:** A container element for elements that describe characteristics of an object.

**Element Attributes:** ID

**Duration (M)**

**Element Name:** duration

**Definition:** The elapsed time of the entire digital audio file.

**Input Guidelines:** Express duration as specified in ISO 8601<sup>20</sup>.

#### **Note (O)**

**Element Name:** note

**Definition:** Any additional textual information about the digital audio file.

**Input Guidelines:** Free text.

#### **Number Channels (R)**

**Element Name:** numChannels

**Definition:** The number of audio channels in the digital audio file.

**Input Guidelines:** Value must be a positive integer.

#### **Sound Channel Map Type (O)**

**Element Name:** soundChannelMapType

**Element Parts:** *Channel Assignment*

**Definition:** Parent element used to wrap any number of Channel Assignment elements.

This structure is used to describe the relationship of sound channels to their destination (e.g. location on sound stage or channels of a mixing board).

#### **Channel Assignment (O)**

**Element Name:** channelAssignment

**Definition:** Maps a sound channel to its destination.

**Input Guidelines:** Each use of the channel assignment element will have two required attributes. ChannelNum identifies the sound channel of the audio object. The first ChannelNum will be 0 and is incremented by 1. The mapLocation attribute will specify the destination of that channel.

**Element Attributes:** *ChannelNum, MapLocation*

#### **Sound Field (R)**

**Element Name:** soundField

**Definition:** The aural space of the digital audio item.

**Input Guidelines:** Free text; e.g. "stereo" or "surround sound."

---

<sup>20</sup> [http://www.iso.org/iso\\_catalogue/catalogue\\_tc/catalogue\\_detail.htm?csnumber=40874](http://www.iso.org/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40874)

## Full example of use:

```
<AUDIOMD ANALOGDIGITALFLAG="FileDigital">
  <fileData>
    <audioBlockSize>1024</audioBlockSize>
    <audioDataEncoding>pulse code modulation (PCM)</audioDataEncoding>
    <bitsPerSample>16</bitsPerSample>
    <byteOrder>0</byteOrder>
    <compression>
      <codecCreatorApp>SoundForge</codecCreatorApp>
      <codecCreatorAppVersion>5.0</codecCreatorAppVersion>
      <codecName>Frauenhofer</codecName>
      <codecQuality>lossy</codecQuality>
    </compression>
    <dataRate>64</dataRate>
    <dataRateMode>Fixed</dataRateMode>
    <formatName>Broadcast Wave Format</formatName>
    <formatNote>SoundForge 5.0</formatNote>
    <formatVersion>3.0</formatVersion>
  </fileData>
  <audioInfo>
    <duration>00:29:12</duration>
  </audioInfo>
</AUDIOMD>
```

## Preservation Metadata

This section provides specifications for capturing event-based metadata. An event is any action which modifies the audio object. We have selected several elements from the *Event* entity of the PREMIS<sup>21</sup> schema to record this metadata. Not all *Event* entity elements are listed; we recommend that metadata authors be familiar with the PREMIS schema in addition to the guidelines here. Please see [Appendix E](#) for a summary chart of requirements and recommendations for preservation metadata.

### High Level Preservation Elements

Event Identifier (M)

Event Type (M)

Event Date/Time (M)

Event Detail (O)

Event Outcome Information (O)

---

### Event Identifier (M)

**Element Name:** eventIdentifier

**Element Parts:** *Event Identifier Type*, *Event Identifier Value*

**Definition:** Container element for recording a unique identifier for the event being described.

**Repeatable:** No

#### **Event Identifier Type (M)**

**Definition:** A designation of the domain within which the event identifier is unique. (e.g. "UUID," "FDA," "UT Repository Event ID")

**Encoding Guidelines:** Encode the type of identifier in a `<PREMIS:eventIdentifierType>` element within the `<PREMIS:eventIdentifier>` container element.

**Input Guidelines:** For most preservation repositories, the *eventIdentifierType* will be its own internal numbering system. It can be implicit within the system and provided explicitly only if the data is exported.

**Repeatable:** No

#### **Event Identifier Value (M)**

**Definition:** The value of the *eventIdentifier*.

---

<sup>21</sup> <http://www.loc.gov/standards/premis/premis.xsd>

**Encoding Guidelines:** Encode the identifier in a <PREMIS:eventIdentifierValue> element within the <PREMIS:eventIdentifier> container element.

**Input Guidelines:** Binary integer

**Repeatable:** No

**Example of Use:**

```
<PREMIS:eventIdentifier>
  <PREMIS:eventIdentifierType>
    UT Repository Event ID
  </PREMIS:eventIdentifierType>
  <PREMIS:eventIdentifierValue>
    0012
  </PREMIS:eventIdentifierValue>
</PREMIS:eventIdentifier>
```

---

## Event Type (M)

**Element Name:** eventType

**Element Parts:** none

**Definition:** A categorization of the nature of the event. Recommended practice is to record detailed information about the event itself in *eventDetail* rather than using a very granular value for *eventType*.

**Encoding Guidelines:** Encode the type of event in a <PREMIS:eventType> element.

**Input Guidelines:** Value must come from controlled list of event type terms found in [Appendix F](#).

**Repeatable:** No

**Example of Use:**

```
<PREMIS:eventType>capture</PREMIS:eventType>
```

---

## Event Date/Time (M)

**Element Name:** eventDateTime

**Element Parts:** none

**Definition:** The single date and time, or date and time range, at or during which the event occurred.

**Encoding Guidelines:** Encode the date and time of the event in the <PREMIS:eventDateTime> element.

**Input Guidelines:** Express date and time as specified in *ISO 8601*<sup>22</sup>.

---

<sup>22</sup> Ibid.

**Repeatable:** No

**Example of Use:**

```
<PREMIS:eventDateTime>  
  2006-07-16T19:20:30+01:00  
</PREMIS:eventDateTime>
```

---

## Event Detail (O)

**Element Name:** eventDetail

**Element Parts:** none

**Definition:** Additional information about the event. *eventDetail* is not intended to be processed by machine. It may record any information about an event and/or point to information stored elsewhere.

**Encoding Guidelines:** Encode event information in a <PREMIS:eventDetail> element.

**Input Guidelines:** Free text. Use proper grammar and punctuation.

**Repeatable:** No

**Example of Use:**

```
<PREMIS:eventDetail>Audio timecode breaks occurred during capture  
</PREMIS:eventDetail>
```

---

## Event Outcome Information (O)

**Element Name:** eventOutcomeInformation

**Element Parts:** *Event Outcome, Event Outcome Detail, Event Outcome Detail Note*

**Definition:** Container element to record Information about the overall result of an event.

**Repeatable:** Yes. Since events may have more than one outcome, this container is repeatable.

### Event Outcome (O)

**Definition:** Information about the overall result of the event.

**Encoding Guidelines:** Encode the success level of the event in a <PREMIS:eventOutcome> subelement within the <PREMIS:eventOutcomeInformation> container element.

**Input Guidelines:** Value must be "success," "partial success," or "failure."

**Repeatable:** No

### Event Outcome Detail (O)

**Definition:** Container element for detailed description of event outcome. This may be used to record all error and warning messages issued by a program involved in the event or to record a

pointer to an error log. If the event was a validity check (e.g., profile conformance) any anomalies or quirks discovered would be recorded here. Contains *Event Outcome Detail Note*

**Repeatable:** Yes

**Event Outcome Detail Note (O)**

**Definition:** A detailed description of the result or product of the event in textual form.

**Optional Practice:** Encode any textual notes about the event in the <PREMIS:eventOutcomeDetailNote> subelement within the <PREMIS:eventOutcomeDetail> container element.

**Input Guidelines:** Free text.

**Example of Use:**

```
<PREMIS:eventOutcomeInformation>
  <PREMIS:eventOutcome>success</PREMIS:eventOutcome>
  <PREMIS:eventOutcomeDetail>
    <PREMIS:eventOutcomeDetailNote>
      Non-standard tags found in header.
    </PREMIS:eventOutcomeDetailNote>
  </PREMIS:eventOutcomeDetail>
</PREMIS:eventOutcomeInformation>
```

## **Appendices**

Appendix A: Descriptive Metadata Summary of Requirements

Appendix B: UT Libraries' Type Vocabulary

Appendix C: Source Metadata Summary of Requirements

Appendix D: Technical Metadata Summary of Requirements

Appendix E: Preservation Metadata Summary of Requirements

Appendix F: Controlled Vocabulary for <eventType> in Preservation Metadata



## Appendix A: Descriptive Metadata Summary of Requirements

Element Name	Element Level of Requirement	Element Parts	Element parts Level of Requirement	Repeatable	Content Controlled
Title	M	None	N/A	No	No
Alternative Title	O	None	N/A	Yes	No
Creator	M	Creator Name Creator Type Creator Affiliation Creator Role	M R O M	Yes Yes Yes Yes	No Yes No Yes
Contributor	O	Contributor Name Contributor Type Contributor Affiliation Contributor Role	O O O O	Yes Yes Yes Yes	No Yes No Yes
Publisher	R	None	N/A	Yes	No
Date Created	M	None	N/A	No	Yes
Language	R	None	N/A	Yes	Yes
Abstract/Summary	O	None	N/A	No	No
Physical Description	R	Extent Note	R R	No	Yes No
Geographic Base	R	None	N/A	Yes	Yes
Subjects	M	Topics Named Entities Geographic Focus	M O M	Yes Yes Yes	Yes No Yes
Type of Resource	M	None	N/A	No	Yes
Genre	O	None	N/A	Yes	Yes
Table of Contents	O	None	N/A	No	No
Note	O	None	N/A	Yes	No
Identifier	M	None	N/A	Yes	No
Location	R	None	N/A	No	No
Rights	M	Rights Type Rights Information	M M	Yes Yes	Yes No

## **Appendix B: UT Libraries' Type Vocabulary**

collection

dataset

event

image

musical score/notation

postcard

architectural drawing

map

photograph

rendering

interactive resource

moving image

physical object

service

software

sound

text

article

book

journal

manuscript

newsprint

thesis

website

## Appendix C: Source Metadata Summary of Requirements

Element Name and Element Parts	Level of Requirement	Element Attribute	Content Controlled
audioType*	M	<i>ID</i> <i>ANALOGDIGITALFLAG</i>	YES
AUDIOSRC*	fileData*	<i>ID</i>	No
	audioBlockSize	R	none
	audioDataEncoding	R	none
	bitsPerSample	M	none
	byteOrder	R	none
	compressionType*	M	<i>ID</i>
	CodecCreatorApp	M	none
	CodecCreatorAppVersion	O	none
	CodecName	O	none
	codecQuality	O	none
	dataRate	R	none
	dataRateMode	R	none
	formatName	M	none
	formatNote	O	none
	formatVersion	O	none
	physicalDataType*	R	none
	condition	R	none
	materialType*	R	<i>ID</i>
	stockBrand	R	none
	usedSides	R	none
	noiseReduction	R	none
	physFormat	R	none
	speed	R	none
	speedNote	O	none
	trackFormat	O	none
	trackingInfoType*	R	<i>ID</i>
	trackingType	R	none
	trackingValue	R	none
	note	R	none
	audioInfo*	M	<i>ID</i>
	duration	M	none
	note	O	none
	numChannels	R	none
soundChannelMapType*	O	none	
channelAssignment	O	<i>CHANNELNUM</i>	
soundField	R	none	

## Appendix D: Technical Metadata Summary of Requirements

\*wrapper element

Element Name and Element Parts		Level of Requirement	Element Attribute	Content Controlled
audioType*		M	<i>ID</i> <i>ANALOGDIGITALFLAG</i>	
AUDIOIMD*	fileData*	M	<i>ID</i>	No
	audioBlockSize	R	none	No
	audioDataEncoding	R	none	No
	bitsPerSample	M	none	No
	byteOrder	R	none	No
	compressionType*	M	<i>ID</i>	No
	CodecCreatorApp	M	none	No
	CodecCreatorAppVersion	O	none	No
	CodecName	O	none	No
	codecQuality	O	none	Yes
	dataRate	R	none	No
	dataRateMode	R	none	Yes
	formatName	M	none	No
	formatNote	O	none	No
	formatVersion	O	none	No
	audioInfo*	M	<i>ID</i>	No
	duration	M	none	Yes
	note	O	none	No
	numChannels	R	none	No
	soundChannelMapType*	O	none	No
channelAssignment	O	<i>CHANNELNUM</i>	No	
soundField	R	none	No	

## Appendix E: Preservation Metadata Summary of Requirements

\* wrapper element

# repeatable

Element Name	Element Level of Requirement	Element Parts	Element Parts Level of Requirement	Content Controlled
Event Identifier*	M	Event Identifier Type Event Identifier Value	M M	No No
Event Type	M	None	N/A	Yes
Event Date/Time	M	None	N/A	<i>encoding</i> attribute limits content
Event Detail	O	None	N/A	No
Event Outcome Information* #	O	Event Outcome Event Outcome Detail#	O O	No No

## Appendix F: Controlled Vocabulary for <eventType> in Preservation Metadata<sup>23</sup>

Controlled Value	Definition
capture	the process whereby a repository actively obtains an object
compression	the process of coding data to save storage space or transmission time
creation	the act of creating a new object
deaccession	the process of removing an object from the inventory of a repository
decompression	the process of reversing the effects of compression
decryption	the process of converting encrypted data to plaintext
deletion	the process of removing an object from repository storage
digital signature validation	the process of determining that a decrypted digital signature matches an expected value
dissemination	the process of retrieving an object from repository storage and making it available to users
fixity check	the process of verifying that an object has not been changed in a given period
ingestion	the process of adding objects to a preservation repository
message digest calculation	the process by which a message digest (“hash”) is created
migration	a transformation of an object creating a version in a more contemporary format
transformation	Process performed on an audio object that results in one or more new audio files that are not bit-wise identical to the source object.

<sup>23</sup> Taken from the PREMIS Data Dictionary 2.0: <http://www.loc.gov/standards/premis/v2/premis-dd-2-0.pdf>