



## Dublin Core Best Practice Guidelines

---

Version 2.1  
December 21, 2016

## Orbis Cascade Alliance Dublin Core Best Practice Guidelines

VERSION	DATE	CREATED/CHANGED BY	CHANGES MADE
1.0	April 27, 2016	Created by Orbis Cascade Alliance Archive Engine West Working Group (2014) and Digital Content Working Group (2015/2016)	First release
2.0	November 2016	Orbis Cascade Alliance Digital Collections Working Group (2016)	Addition of contributor, format, relation, and source elements; changes to creator, rights, spatial coverage, language, and subject
2.1	December 21, 2016	Orbis Cascade Alliance Digital Collections Working Group (2016)	Changes to creator, contributor, date, format, spatial coverage, subject, type; minor edits and reformatting

The purpose of the Orbis Cascade Alliance’s Dublin Core Best Practices Guidelines are to:

- Ensure a basic level of uniformity in the structure, encoding, and content of Alliance digital object metadata in keeping with the Mountain West Digital Library Dublin Core metadata application profile and other relevant standards
- Promote interoperability within Alliance institutions metadata records developed from diverse repositories
- Facilitate access to digital content by end users

### Archives Engine West Working Group (2014)

Stephanie Beene	Lewis & Clark College
Kira Homo	University of Oregon
Tom Johnson	Oregon State University/Digital Public Library of America
Sam Meister	University of Montana
Leigh Grinstead	Metadata Consultant
Jodi Allison-Bunnell	Alliance staff

### Digital Content Working Group (2015/2016)

Ann Lally (Chair, 2015/2016)	University of Washington
Devin Becker (2015/2016)	University of Idaho
Stephanie Beene (2015)	Lewis & Clark College
Rick Block (2015/2016)	Seattle University
Michael Boock (2015)	Oregon State University
Laura Buchholz (2016)	Reed College
Theo Gerontakos (2015/2016)	University of Washington
Jodi Allison-Bunnell (2015/2016)	Alliance staff

### **Digital Collections Working Group (2016)**

Janet Hauck (Chair, 2016)

Theo Gerontakos

Julia Simic

Anneliese Dehner

Jodi Allison-Bunnell

Whitworth University

University of Washington

University of Oregon

Metadata Applications Librarian

Alliance staff

## Contents

<b>Introduction.....</b>	<b>4</b>
<b>I. Best Practices for All</b>	
<b>Fields.....</b>	<b>5</b>
Use of semicolons	
Requirement status	
Enrichment	
Adding local fields not covered by these guidelines	
Use of the term “resource”	
<b>II. Explanation of Table</b>	
<b>Components.....</b>	<b>7</b>
<b>III. Element Tables (in alphabetical</b>	
<b>order).....</b>	<b>8</b>
contributor.....	8
creator.....	9
date.....	10
description.....	12
format.....	12
identifier.....	13
language.....	14
relation.....	15
rights.....	16
source.....	17
spatial coverage.....	17
subject.....	18
title.....	20
type.....	20
<b>IV. Vocabulary Encoding Schemes.....</b>	<b>22</b>
AAT	
DCMI Type	
GeoNames	
IMT	
ISNI	
LCNAF	
LCSH	
RightsStatements.org	
TGN	
ULAN	
<b>V. Syntax Encoding Schemes.....</b>	<b>24</b>
EDTF	

ISO639-2  
ISO8601  
W3CDTF

## VI.

**Crosswalks**.....  
.....25

## Introduction

Created by the Orbis Cascade Alliance Archives West Working Group, Digital Content Working Group, and Digital Collections Working Group. It is intended to guide Alliance members who create and manage digital object metadata. These standards focus ultimately on producing the desired outputs, but offer guidance on how to create metadata such that it will most easily create those desired outputs.

Other institutions are free to adopt the Orbis Cascade Alliance Dublin Core Best Practices Guidelines, in full or in part, for their local use.

These guidelines are not to be used for Encoded Archival Description (EAD) records; for those, please consult the Alliance's EAD Best Practice Guidelines at <https://www.orbiscascade.org/bestpracticesforead1/>.

In order for your digital objects and metadata to be harvested into an Alliance-wide aggregation of digital content, the below requirements will need to be met to ensure consistency and usability. However, please note: **These are recommendations for preparing your digital object metadata for harvest and are not meant to dictate how you practice metadata creation at your own institution.** That said, we do hope that these guidelines will be useful for your practices going forward, and that the recommendations here might serve as models for your digital object metadata creation when needed.

These guidelines are based on the Mountain West Digital Library Dublin Core Application Profile, Version 2.0, released July 20, 2011.

### The Dublin Core Best Practices Guidelines consists of six sections:

- I. Best Practices for All Fields
- II. Explanation of Table Components
- III. Element Tables (in alphabetical order)
- IV. Vocabulary Encoding Schemes
- V. Syntax Encoding Schemes
- VI. Crosswalk

### What's new in the Dublin Core Best Practices Guidelines 2.1:

- More information about each element
  - Options to insert common values in every record of a collection
  - Harvester transformations
  - Schemes

- Major changes in type fields
- “Required when applicable” renamed “Recommended”
- More guidance on vocabularies and encoding schemes throughout, with tables for the major schemes provided in new sections (IV and V)
- Inclusion of data crosswalks for DPLA and Primo in new section (VI)

## I. Best Practices for All Fields

### Use of semicolons

To retain integrity of data, separate multiple entries within a single field by inserting a semicolon and a space between entries.

### Requirement status

**Required:** Field must be included in record.

There are five required fields:

- date
- identifier
- rights
- title
- type

**Recommended:** Inclusion of the field is recommended.

There are six recommended fields:

- creator
- description
- format
- language
- relation
- subject

**Optional:** Inclusion of field is up to the discretion of Alliance institutions.

There are two optional fields:

- contributor
- source

### Enrichment

Enriching the following fields, by reconciling values to controlled vocabulary terms, is preferred practice. However this work at the discretion of Alliance institutions. Review the element tables of these fields for more information about preferred schemas.

- contributor
- creator
- type

### **Adding local fields not covered by these guidelines**

This profile does not prohibit Alliance institutions from adding other fields to their metadata records as needed to serve local needs. However, these fields will not be harvested by the Alliance Harvester. Some examples of fields needed locally may include:

- fields for data specific to a particular discipline or user community
- tags needed for customized searching
- natural language date fields to display unformatted dates
- other qualified Dublin Core elements such as audience or bibliographicCitation

### **Use of the term “resource”**

This profile uses the term resource to refer to the digital resource provided for direct access by users and described by the metadata record. This resource may be a born-digital object, a digital object converted from another digital format, or a digital object converted from a non-digital format such as text, taped recordings, slides, film, etc.

## II. Explanation of Table Components

<b>Label</b>	The name assigned to the field by these guidelines
<b>DC Mapping</b>	Lists the Dublin Core element to map to for harvesting purposes and a URI to the DC Metadata Element definition.
<b>Definition</b>	Definition, based on the DC Metadata Element set.
<b>Is Field Required?</b>	Indicates the extent to which this field is required in a record: <ul style="list-style-type: none"> <li>● <b>Required:</b> Field must be included in record.</li> <li>● <b>Recommended:</b> Inclusion of the field is recommended.</li> <li>● <b>Optional:</b> inclusion of field is up to the discretion of the Alliance institution.</li> </ul>
<b>Is Field Repeatable?</b>	“No” indicates a field may occur just once in a single record. “Yes” indicates a field may appear multiple times in a single record.
<b>OAI Editing Options</b>	Identifies option to insert a common value in every record in an OAI set.
<b>How to Use</b>	Guidelines for the content of the field.
<b>Schemes</b>	<p>Identifies controlled vocabulary or format convention used to structure the data contained in the field; these are called schemes.</p> <p>For more information about a mentioned scheme: <a href="#">Section IV: Vocabulary Encoding Schemes</a> of these guidelines provide tables for the referenced vocabulary encoding schemes while <a href="#">Section V: Syntax Encoding Schemes</a> provides tables for format conventions for languages and dates. The last row of each table provides a link to a list of controlled vocabulary terms or explanation of a format convention such as how to structure dates or language codes.</p> <p>Indicates the extent to which use of this scheme is required in a record:</p> <ul style="list-style-type: none"> <li>● <b>Required:</b> Data must use the identified vocabulary or convention</li> <li>● <b>Preferred:</b> Using the identified vocabulary or convention is preferred, but not required</li> </ul>
<b>Input Examples</b>	Identifies examples of data entered in the field.
<b>Output Examples</b>	Identifies examples of data output from the field.
<b>Alliance Harvester Transformations</b>	Lists data transformations performed by the Alliance harvester.



### III. Element Tables (in alphabetical order)

Label	Contributor
<b>DC Mapping</b>	dc:contributor <a href="http://purl.org/dc/elements/1.1/contributor">http://purl.org/dc/elements/1.1/contributor</a>
<b>Definition</b>	An entity responsible for making contributions to the resource.
<b>Is Field Required?</b>	Optional
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	For multiple contributors, either repeat the property or separate values with a semicolon.  Form according to Resource Description and Access (RDA)
<b>OAI Editing Options</b>	None
<b>Schemes</b>	Preferred: <ul style="list-style-type: none"> <li>● Library of Congress Name Authority File (LCNAF)</li> <li>● Getty Union List of Artist Names (ULAN)</li> <li>● International Standard Name Identifier (ISNI)</li> <li>● Or any other contributor to The Virtual International Name Authority File (VIAF) <a href="http://viaf.org/">http://viaf.org/</a></li> </ul>
<b>Input Examples</b>	Aggens, Steffen Heinrich, 1834-1888  Callaway Family
<b>Output Examples</b>	<dc:contributor>Aggens, Steffen Heinrich, 1834-1888</dc:contributor>  <dc:contributor>Callaway Family</dc:contributor>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>● Splits semicolon delimited values into separate properties</li> <li>● Removes trailing punctuation</li> <li>● Trims whitespace</li> <li>● Strips HTML tags</li> <li>● Suppresses “unknown” values</li> <li>● Inserts VIAF URI as a separate contributor property when there is a VIAF compliant text string</li> <li>● For Primo, maps to 2 properties:                             <ul style="list-style-type: none"> <li>○ Maps to dc:contributor</li> <li>○ Maps to dc:contributor.undated and strips dates from these values</li> </ul> </li> </ul>

Label	Creator
<b>DC Mapping</b>	dc:creator <a href="http://purl.org/dc/elements/1.1/creator">http://purl.org/dc/elements/1.1/creator</a>
<b>Definition</b>	An entity primarily responsible for making the resource.
<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	For multiple creators, either repeat the property or separate values with a semicolon.  When present, form according to Resource Description and Access (RDA).
<b>OAI Editing Options</b>	None
<b>Schemes</b>	Preferred: <ul style="list-style-type: none"> <li>● Library of Congress Name Authority File (LCNAF)</li> <li>● Getty Union List of Artist Names (ULAN)</li> <li>● International Standard Name Identifier (ISNI)</li> <li>● Or any other contributor to The Virtual International Name Authority File (VIAF) <a href="http://viaf.org/">http://viaf.org/</a></li> </ul>
<b>Input Examples</b>	Aggens, Steffen Heinrich, 1834-1888  Callaway Family  Adelpian Literary Society (Oregon State University)
<b>Output Examples</b>	<dc:creator>Aggens, Steffen Heinrich, 1834-1888</dc:creator>  <dc:creator>Callaway Family</dc:creator>  <dc:creator>Adelpian Literary Society (Oregon State University)</dc:creator>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>● Splits semicolon delimited values into separate properties</li> <li>● Removes trailing punctuation</li> <li>● Trims whitespace</li> <li>● Strips HTML tags</li> <li>● Suppresses “unknown” values</li> <li>● Inserts VIAF URI as a separate creator property when there is a VIAF compliant text string</li> <li>● For Primo, maps to 2 properties:                             <ul style="list-style-type: none"> <li>○ Maps to dc:creator</li> <li>○ Maps to dc:creator.undated and strips dates from these values</li> </ul> </li> </ul>

Label	Date
<b>DC Mapping</b>	dc:date <a href="http://purl.org/dc/elements/1.1/date">http://purl.org/dc/elements/1.1/date</a>
<b>Definition</b>	A point or period of time associated with an event in the lifecycle of the resource.
<b>Is Field Required?</b>	<b>Required</b>
<b>Is Field Repeatable?</b>	Yes, but only the first dc:date will be harvested
<b>How to Use</b>	<p>A resource may have several dates associated with it. The date covered by this table refers to the creation of the original resource, that is, when the resource was first created, before undergoing any conversion.</p> <p>Additional dates are allowed, though only one date (the first instance of dc:date output) will be harvested.</p> <p>If the date is unknown, specify an estimated date or date range.</p> <p>For more complex dates than shown in examples below, see the EDTF proposed standard at the Library of Congress, or consult Alliance staff.</p>
<b>OAI Editing Options</b>	None
<b>Schemes</b>	Required: <ul style="list-style-type: none"> <li>• ISO8601</li> <li>• Library of Congress Extended Date Time Format (EDTF) level 0 or 1</li> <li>• W3CDTF</li> </ul>
<b>Input Examples</b>	Year: YYYY (e.g. 1997)  Year and month: YYYY-MM (e.g. 1997-07)  Complete date: YYYY-MM-DD (e.g. 1997-07-16) YYYYMMDD (e.g. 19970716)  Complete date plus hours and minutes: YYYY-MM-DDThh:mmTZD (e.g. 1997-07-16T19:20+01:00)  Complete date plus hours, minutes and seconds: YYYY-MM-DDThh:mm:ssTZD (e.g.1997-07-16T19:20:30+01:00)  Complete date plus hours, minutes, seconds and a decimal fraction of a second: YYYY-MM-DDThh:mm:ss.STZD (e.g.1997-07-16T19:20:30.45+01:00)  Date range: YYYY/YYYY (e.g. 1900/1920)

	<p>Decade: YYYYu (e.g. 194u)</p> <p>Circa/approximate: YYYY~ (e.g. 1886~) YYYY? (e.g. 1886?)</p>
<b>Output Examples</b>	<pre>&lt;dc:date&gt;1997&lt;/dc:date&gt; &lt;dc:date&gt;1997-07&lt;/dc:date&gt; &lt;dc:date&gt;1997-07-16&lt;/dc:date&gt; &lt;dc:date&gt;19970716&lt;/dc:date&gt; &lt;dc:date&gt;1997-07-16T19:20+01:00&lt;/dc:date&gt; &lt;dc:date&gt;1997-07-16T19:20:30+01:00&lt;/dc:date&gt; &lt;dc:date&gt;1997-07-16T19:20:30.45+01:00&lt;/dc:date&gt; &lt;dc:date&gt;1900/1920&lt;/dc:date&gt; &lt;dc:date&gt;194u&lt;/dc:date&gt; &lt;dc:date&gt;1886~&lt;/dc:date&gt; &lt;dc:date&gt;1886?&lt;/dc:date&gt;</pre>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"><li>● Trims whitespace</li><li>● Strips HTML tags</li><li>● Harvests the first instance of dc:date output and ignores other dc:date values</li><li>● Replaces hyphens with forward slashes in date ranges</li><li>● Ignores timestamps</li><li>● For Digital Commons default dates (YYYY-MM-DDThh:mm:ssTZD): ignores month and day if both equal "01"</li><li>● For DPLA, maps to 4 properties:<ul style="list-style-type: none"><li>○ Maps to dpla:SourceResource/dc:date</li><li>○ Maps to edm:TimeSpan/dc:date</li><li>○ Derives start date from dc:date and maps to edm:TimeSpan/edm:begin</li><li>○ Derives end date from dc:date and maps to edm:TimeSpan/edm:end</li></ul></li><li>● For Primo, maps to 3 properties:<ul style="list-style-type: none"><li>○ Maps to dc:date</li><li>○ Derives start date from dc:date and maps to dc:date.start; Format as YYYYMMDD; When decade and century are approximated with the presence of "u" or "?" (eg. 194u; 19??) transform to the first day in the decade or century (eg. 19400101; 19000101)</li><li>○ Derives end date from dc:date and maps to dc:date.end; Format as</li></ul></li></ul>

YYYYMMDD; When decade and century are approximated with the presence of "u" or "?" (eg. 194u; 19??) transform to the last day in the decade or century (eg. 19491231; 19991231)

Label	Description
<b>DC Mapping</b>	dc:description <a href="http://purl.org/dc/elements/1.1/description">http://purl.org/dc/elements/1.1/description</a>
<b>Definition</b>	An account of the resource.
<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	Output all dc:description
<b>OAI Editing Options</b>	None
<b>Schemes</b>	None
<b>Input Examples</b>	Camp II Bus Station at Poston with a Japanese flair.  Postcard of the Memorial Gymnasium on the University of Idaho campus in Moscow, Idaho.  Alpine aster; Aster alpigenus var. alpigenus
<b>Output Examples</b>	<dc:description>Camp II Bus Station at Poston with a Japanese flair.</dc:description>  <dc:description>Postcard of the Memorial Gymnasium on the University of Idaho campus in Moscow, Idaho.</dc:description>  <dc:description>Alpine aster; Aster alpigenus var. alpigenus</dc:description>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• Strips HTML tags</li> <li>• When a URL is the only value in dc:description, the value is ignored</li> </ul>

Label	Format
<b>DC Mapping</b>	dc:format <a href="http://purl.org/dc/elements/1.1/format">http://purl.org/dc/elements/1.1/format</a>
<b>Definition</b>	The file format, physical medium, or dimensions of the resource.

<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	Output physical format and/or digital format.  For multiple formats, either repeat the property or separate values with a semicolon.  Preferred (for physical format): output the number of units and the carrier type.
<b>OAI Editing Options</b>	To insert a common format value in all records of an OAI set, insert format value(s) in Alliance harvester's submission interface.
<b>Schemes</b>	Preferred (for digital format): <ul style="list-style-type: none"> <li>• Internet Media Type (IMT)</li> <li>• A commonly used subset of the entire IMT set of acceptable formats is available for download here: <a href="http://mwdl.org/docs/format_values.txt">http://mwdl.org/docs/format_values.txt</a></li> </ul> Preferred (for physical format): <ul style="list-style-type: none"> <li>• Resource Description and Access (RDA) 3.4.1.3, making sure to use a type of unit from the RDA 3.3 "Carrier Type" list or from the "Exceptions" list provided at the very end of 3.4.1.3.</li> </ul>
<b>Input Examples</b>	audio/mp4; application/pdf  image/tiff  bronze 22 in.
<b>Output Examples</b>	<dc:format>audio/mp4; application/pdf</dc:format>  <dc:format>image/tiff</dc:format>  <dc:format>bronze 22 in.</dc:format>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• If format value(s) are added during OAI submission, replaces dc:format in the OAI-PMH feed with format value(s) from the submission interface</li> <li>• Splits semicolon delimited values into separate properties</li> <li>• Removes trailing punctuation</li> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> <li>• For DPLA, maps to 2 properties: <ul style="list-style-type: none"> <li>○ Maps digital format values to edm:webResource/dc:format</li> <li>○ Maps physical format values to dpla:sourceResource/dc:format</li> </ul> </li> </ul>

Label	Identifier
<b>DC Mapping</b>	dc:identifier <a href="http://purl.org/dc/elements/1.1/identifier">http://purl.org/dc/elements/1.1/identifier</a>

<b>Definition</b>	An unambiguous reference to the resource within a given context.
<b>Is Field Required?</b>	<b>Required</b>
<b>Is Field Repeatable?</b>	Yes, but only the record URI will be harvested
<b>How to Use</b>	<p>Output the resource identifier. Many digital asset management systems, such as CONTENTdm and bepress Digital Commons, automatically create, populate, and map the main identifier field. This main identifier is a URL for the resource.</p> <p>Additional identifier fields may be created as needed for local use, such as call number, filename, etc. However, only the identifier containing the URI leading back to the resource will be harvested.</p>
<b>OAI Editing Options</b>	None
<b>Schemes</b>	<p>Required:</p> <ul style="list-style-type: none"> <li>Uniform Resource Identifier (URI) <a href="http://www.ietf.org/rfc/rfc2396.txt">http://www.ietf.org/rfc/rfc2396.txt</a></li> </ul>
<b>Input Examples</b>	<p><a href="http://digitalcollections.lclark.edu/items/show/6162">http://digitalcollections.lclark.edu/items/show/6162</a></p> <p><a href="http://cdm16786.contentdm.oclc.org/cdm/ref/collection/ohc/id/2">http://cdm16786.contentdm.oclc.org/cdm/ref/collection/ohc/id/2</a></p>
<b>Output Examples</b>	<p><code>&lt;dc:identifier&gt;http://digitalcollections.lclark.edu/items/show/6162&lt;/dc:identifier&gt;</code></p> <p><code>&lt;dc:identifier&gt;http://cdm16786.contentdm.oclc.org/cdm/ref/collection/ohc/id/2&lt;/dc:identifier&lt;/dc:identifier&gt;</code></p>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>Harvests the record URI and ignores other dc:identifier values</li> <li>Trims whitespace</li> </ul>

Label	Language
<b>DC Mapping</b>	dc:language <a href="http://purl.org/dc/elements/1.1/language">http://purl.org/dc/elements/1.1/language</a>
<b>Definition</b>	A language of the resource.
<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	<p>Output ISO 639-2 three letter codes or language names as they appear in ISO 639-2.</p> <p>For multiple languages, either repeat the property or separate values with a semicolon.</p> <p>If there is no linguistic content, leave blank.</p>

<b>OAI Editing Options</b>	To insert a common language value in all records of an OAI set, insert language value(s) in Alliance harvester's submission interface.
<b>Schemes</b>	Required: <ul style="list-style-type: none"> <li>• ISO639-2</li> </ul>
<b>Input Examples</b>	gre  ell  eng; spa  English; Spanish
<b>Output Examples</b>	<dc:language>gre</dc:language>  <dc:language>ell</dc:language>  <dc:language>eng; spa</dc:language>  <dc:language>English; Spanish</dc:language>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• If language value(s) are added during submission, replaces dc:language in the OAI-PMH feed with language value(s) from the submission interface</li> <li>• Splits semicolon delimited values into separate properties</li> <li>• Removes trailing punctuation</li> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> <li>• Transforms dc:language names to three letter codes</li> <li>• De-duplicates dc:language values within a single record</li> </ul>

Label	Relation
<b>DC Mapping</b>	dc:relation <a href="http://purl.org/dc/elements/1.1/relation">http://purl.org/dc/elements/1.1/relation</a>
<b>Definition</b>	A related resource.
<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes, but only the Archives West Archival Resource Key (ARK) will be harvested.
<b>How to Use</b>	Output the relation value as an Archives West ARK.  Additional relation fields/values may be created as needed for local use, to show relationships between the resource and other resources. However, only the relation value containing the Archives West ARK will be harvested.
<b>OAI Editing Options</b>	None



<b>Schemes</b>	Required: <ul style="list-style-type: none"> <li>Archival Resource Key (ARK) <a href="https://n2t.net/ark:/13030/c7cv4br18">https://n2t.net/ark:/13030/c7cv4br18</a></li> </ul>
<b>Input Examples</b>	<a href="http://archiveswest.orbiscascade.org/ark:/80444/xv57799">http://archiveswest.orbiscascade.org/ark:/80444/xv57799</a>
<b>Output Examples</b>	<dc:relation> <a href="http://archiveswest.orbiscascade.org/ark:/80444/xv57799">http://archiveswest.orbiscascade.org/ark:/80444/xv57799</a> </dc:relation>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>Harvests the Archives West ARK and ignores other dc:relation values</li> <li>Trims whitespace</li> </ul>

Label	Rights
<b>DC Mapping</b>	dc:rights <a href="http://purl.org/dc/elements/1.1/rights">http://purl.org/dc/elements/1.1/rights</a>
<b>Definition</b>	Information about rights held in and over the resource.
<b>Is Field Required?</b>	<b>Required</b>
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	<p>Output a rights statement pair pertaining to the resource.</p> <p>A rights statement pair consists of:</p> <ul style="list-style-type: none"> <li>one dc:rights property containing a RightsStatements.org URI</li> <li>one dc:rights property containing a free text rights statement that complements the selected RightsStatements.org URI</li> </ul> <p>For multiple statements, repeat the property.</p> <p>See <a href="#">the Alliance's Documentation Center</a> for more information applicable to all types of rights.</p>
<b>OAI Editing Options</b>	To insert a common rights value in all records of an OAI set, insert rights value(s) in Alliance harvester's submission interface.
<b>Schemes</b>	Required: <ul style="list-style-type: none"> <li>Uniform Resource Identifier (URI) <a href="http://www.ietf.org/rfc/rfc2396.txt">http://www.ietf.org/rfc/rfc2396.txt</a></li> <li>RightsStatements.org</li> </ul>
<b>Input Examples</b>	Copyright held by the estate of Estelle Baruch.  <a href="http://rightsstatements.org/vocab/InC-OW-EU/1.0/">http://rightsstatements.org/vocab/InC-OW-EU/1.0/</a>
<b>Output Examples</b>	<dc:rights>Copyright held by the estate of Estelle Baruch.</dc:rights>  <dc:rights> <a href="http://rightsstatements.org/vocab/InC">http://rightsstatements.org/vocab/InC</a>

	<code>-OW-EU/1.0/&lt;/dc:rights&gt;</code>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• If rights values are added during OAI submission, replaces dc:rights in the OAI-PMH feed with rights values from the submission interface</li> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> <li>• For Primo, maps to 2 properties: <ul style="list-style-type: none"> <li>○ Maps RightsStatements.org URIs to dc:rights.standardized</li> <li>○ Maps free text rights statements to dc:rights.freetext</li> </ul> </li> </ul>

Label	Source
<b>DC Mapping</b>	dc:source <a href="http://purl.org/dc/elements/1.1/source">http://purl.org/dc/elements/1.1/source</a>
<b>Definition</b>	A related resource from which the described resource is derived.
<b>Is Field Required?</b>	Optional
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	Commonly used when the resource is the result of digitization of non-digital originals. In these cases, sufficient information to identify and find the original resource is provided.
<b>OAI Editing Options</b>	None
<b>Schemes</b>	None
<b>Input Examples</b>	RC607.A26W574 1996
<b>Output Examples</b>	<code>&lt;dc:source&gt;RC607.A26W574 1996&lt;/dc:source&gt;</code>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> </ul>

Label	Spatial coverage
<b>DC Mapping</b>	dc:coverage <a href="http://purl.org/dc/elements/1.1/coverage">http://purl.org/dc/elements/1.1/coverage</a>
<b>Definition</b>	The spatial topic of the resource, the spatial applicability of the resource, or the jurisdiction under which the resource is relevant.
<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes

<b>How to Use</b>	<p>Output spatial coverage only.</p> <p>For multiple coverage statements, either repeat the property or separate values with a semicolon.</p> <p>Output as human readable place name or geographic coordinates (expressed as decimal degrees instead of degrees-minutes-seconds format).</p> <p>If outputting geographic coordinates in separate properties, output latitude first.</p>
<b>OAI Editing Options</b>	None
<b>Schemes</b>	<p>Use of a scheme is recommended. Some options are:</p> <ul style="list-style-type: none"> <li>● GeoNames</li> <li>● Library of Congress Subject Headings (LCSH)</li> <li>● Thesaurus of Geographic Names (TGN)</li> </ul>
<b>Input Examples</b>	<p>Boise (Idaho)</p> <p>United States--Idaho--Boise</p> <p>43.618881, -116.215019</p> <p>Boise, Ada County, Idaho, United States</p>
<b>Output Examples</b>	<pre>&lt;dc:coverage&gt;Boise (Idaho)&lt;/dc:coverage&gt;</pre> <pre>&lt;dc:coverage&gt;United States--Idaho--Boise&lt;/dc:coverage&gt;</pre> <pre>&lt;dc:coverage&gt;43.618881, -116.215019&lt;/dc:coverage&gt;</pre> <pre>&lt;dc:coverage&gt;Boise, Ada County, Idaho, United States&lt;/dc:coverage&gt;</pre>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>● Splits semicolon delimited values into separate properties</li> <li>● Removes trailing punctuation</li> <li>● Trims whitespace</li> <li>● Strips HTML tags</li> <li>● Joins latitude and longitude values, separating with a comma, when coordinates are present in separate dc:coverage properties</li> <li>● For Primo, maps to 2 properties:             <ul style="list-style-type: none"> <li>○ Maps human readable placenames to dc:coverage.spatial</li> <li>○ Maps geographic coordinates to dc:coverage.spatial.latlng</li> </ul> </li> </ul>

Label	Subject
<b>DC Mapping</b>	<p>dc:subject</p> <p><a href="http://purl.org/dc/elements/1.1/subject">http://purl.org/dc/elements/1.1/subject</a></p>

<b>Definition</b>	The topic of the resource.
<b>Is Field Required?</b>	Recommended
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	Output all dc:subject.  For multiple subjects, either repeat the property or separate values with a semicolon.
<b>OAI Editing Options</b>	None
<b>Schemes</b>	None
<b>Input Examples</b>	Dentistry  Racetracks (Horse racing)--United States  Heart Failure/physiopathology  Gastronomy  Pencils  Film trailers  Nature films  Dogs; Cats; Zebras
<b>Output Examples</b>	<dc:subject>Dentistry</dc:subject>  <dc:subject>Racetracks (Horse racing)--United States</dc:subject>  <dc:subject>Heart Failure/physiopathology</dc:subject>  <dc:subject>Gastronomy</dc:subject>  <dc:subject>Pencils</dc:subject>  <dc:subject>Film trailers</dc:subject>  <dc:subject>nature films</dc:subject>  <dc:subject>Dogs; Cats; Zebras</dc:subject>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• Splits semicolon delimited values into separate properties</li> <li>• Removes trailing punctuation</li> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> </ul>

Label	Title
<b>DC Mapping</b>	dc:title <a href="http://purl.org/dc/elements/1.1/title">http://purl.org/dc/elements/1.1/title</a>
<b>Definition</b>	A name given to the resource.
<b>Is Field Required?</b>	<b>Required</b>
<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	Each title property should have a single title value.  For multiple titles, repeat the property.
<b>OAI Editing Options</b>	None
<b>Schemes</b>	None
<b>Input Examples</b>	Haystack Rock  Bakery at McNeil Island Penitentiary  White Pass & Yukon Railroad train stopped at the summit of White Pass, ca. 1914
<b>Output Examples</b>	<dc:title>Haystack Rock</dc:title>  <dc:title>Bakery at McNeil Island Penitentiary</dc:title>  <dc:title>White Pass & Yukon Railroad train stopped at the summit of White Pass, ca.1914</dc:title>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> </ul>

Label	Type
<b>DC Mapping</b>	dc:type <a href="http://purl.org/dc/elements/1.1/type">http://purl.org/dc/elements/1.1/type</a>
<b>Definition</b>	The nature or genre of the resource.
<b>Is Field Required?</b>	<b>Required</b>

<b>Is Field Repeatable?</b>	Yes
<b>How to Use</b>	<p>Output at least one value from DCMI Type vocabulary.</p> <p>For multiple values, either repeat the property or separate values with a semicolon.</p> <p>Optional:</p> <ul style="list-style-type: none"> <li>• Output one or more genre value(s) to refine the selected DCMI Type value. Adding genre values is optional and is in addition to the required type value(s).</li> </ul>
<b>OAI Editing Options</b>	To insert a common type or genre value in all records of an OAI set, insert value(s) in Alliance harvester's submission interface.
<b>Schemes</b>	<p>Required (for required type):</p> <ul style="list-style-type: none"> <li>• DCMI Type Vocabulary</li> </ul> <p>Preferred (for optional genre):</p> <ul style="list-style-type: none"> <li>• Art &amp; Architecture Thesaurus (AAT)</li> <li>• A commonly used subset of the entire AAT genre terms is available for download here: <a href="http://mwdl.org/docs/AAT_subset.txt">http://mwdl.org/docs/AAT_subset.txt</a></li> </ul>
<b>Input Examples</b>	<p>Image; Black-and-white photographs</p> <p>Image; MovingImage</p> <p>Sound; Text</p> <p>Text; Articles</p>
<b>Output Examples</b>	<pre>&lt;dc:type&gt;Image; Black-and-white photographs&lt;/dc:type&gt;</pre> <pre>&lt;dc:type&gt;Image; MovingImage&lt;/dc:type&gt;</pre> <pre>&lt;dc:type&gt;Sound; Text&lt;/dc:type&gt;</pre> <pre>&lt;dc:type&gt;Text; Articles&lt;/dc:type&gt;</pre>
<b>Alliance Harvester Transformations</b>	<ul style="list-style-type: none"> <li>• If type value(s) are added during OAI submission, replaces dc:type in the OAI-PMH feed with type value(s) from the submission interface</li> <li>• Splits semicolon delimited values into separate properties</li> <li>• Removes trailing punctuation</li> <li>• Trims whitespace</li> <li>• Strips HTML tags</li> <li>• Adds DCMI Type URI to DCMI Type text strings</li> <li>• Adds AAT URI to AAT text strings</li> <li>• For DPLA, maps to 2 properties: <ul style="list-style-type: none"> <li>○ Maps DCMI Type values to dpla:sourceResource/dcterms:type</li> <li>○ Maps non-DCMI Type values to dpla:sourceResource/edm:hasType</li> </ul> </li> <li>• For Primo, maps to 2 properties: <ul style="list-style-type: none"> <li>○ Maps DCMI Type values to dc:type</li> <li>○ Maps non-DCMI Type values to dc:genre</li> </ul> </li> </ul>

## IV. Vocabulary Encoding Schemes

Term	AAT
Full Name	Art and Architecture Thesaurus
Definition	A structured vocabulary containing terms, descriptions, and other information for generic concepts related to art, architecture, and material culture. It is organized hierarchically within seven facets: associated concepts, physical properties, styles and periods, agents, activities, materials, and objects.
List of Terms	<a href="http://www.getty.edu/research/tools/vocabularies/aat">http://www.getty.edu/research/tools/vocabularies/aat</a> A commonly used subset of the entire AAT genre terms is available for download here: <a href="http://mwdl.org/docs/AAT_subset.txt">http://mwdl.org/docs/AAT_subset.txt</a>

Term	DCMI Type
Full Name	DCMI Type Vocabulary
Definition	The set of classes specified by the DCMI Type Vocabulary, used to categorize the nature or genre of the resource. <a href="http://purl.org/dc/terms/DCMIType">http://purl.org/dc/terms/DCMIType</a>
List of Terms	<a href="http://dublincore.org/documents/dcmi-type-vocabulary/">http://dublincore.org/documents/dcmi-type-vocabulary/</a>

Term	GeoNames
Full Name	GeoNames
Definition	A geo-spatial database including geographic data such as place names in various languages, latitude, longitude, and altitude.
List of Terms	<a href="http://www.geonames.org/">http://www.geonames.org/</a>

Term	IMT
Full Name	Internet Media Types
Definition	Media types specified by the Internet Assigned Numbers Authority. <a href="http://purl.org/dc/terms/IMT">http://purl.org/dc/terms/IMT</a>
List of Terms	<a href="http://www.iana.org/assignments/media-types/">http://www.iana.org/assignments/media-types/</a> A commonly used subset of the entire IMT set of acceptable formats is available for

download here: [http://mwdl.org/docs/format\\_values.txt](http://mwdl.org/docs/format_values.txt)

Term	ISNI
Full Name	International Standard Name Identifier
Definition	ISNI is the ISO certified global standard number for identifying contributors to creative works and those active in their distribution, including researchers, inventors, writers, artists, visual creators, performers, producers, publishers, aggregators, etc.
List of Terms	<a href="http://www.isni.org/">http://www.isni.org/</a>

Term	LCNAF
Full Name	Library of Congress Name Authorities File
Definition	The set of authorized personal and corporate names specified by the Library of Congress.
List of Terms	<a href="http://authorities.loc.gov">http://authorities.loc.gov</a>

Term	LCSH
Full Name	Library of Congress Subject Headings
Definition	The set of labeled concepts specified by the Library of Congress Subject Headings.
List of Terms	<a href="http://www.loc.gov/aba/cataloging/subject/">http://www.loc.gov/aba/cataloging/subject/</a>

Term	RightsStatements.org
Full Name	RightsStatements.org
Definition	12 standardized rights statements, developed by Europeana and DPLA, that can be used by cultural heritage institutions to communicate the copyright and re-use status of digital objects to the public.
List of Terms	<a href="http://rightsstatements.org/page/1.0/?language=en">http://rightsstatements.org/page/1.0/?language=en</a>



<b>Term</b>	<b>TGN</b>
<b>Full Name</b>	Thesaurus of Geographic Names
<b>Definition</b>	A structured vocabulary, including names, descriptions, and other metadata for extant and historical cities, empires, archaeological sites, and physical features important to research of art and architecture.
<b>List of Terms</b>	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/index.html">https://www.getty.edu/research/tools/vocabularies/tgn/index.html</a>

<b>Term</b>	<b>ULAN</b>
<b>Full Name</b>	Union List of Artist Names
<b>Definition</b>	A Getty structured vocabulary, including names, biographies, related people, and other metadata about artists, architects, firms, studios, museums, patrons, sitters, and other people and groups involved in the creation and study of art and architecture.
<b>List of Terms</b>	<a href="https://www.getty.edu/research/tools/vocabularies/ulan/index.html">https://www.getty.edu/research/tools/vocabularies/ulan/index.html</a>

## V. Syntax Encoding Schemes

Term	EDTF
Full Name	Library of Congress Extended Date Time Format
Definition	Defines a profile of and extension to ISO 8601, the International Standard for the representation of dates and times. Level 0: profile of ISO 8601 Level 1: simple extensions
List of Terms	Level 0: <a href="http://www.loc.gov/standards/datetime/pre-submission.html#level0">http://www.loc.gov/standards/datetime/pre-submission.html#level0</a> Level 1: <a href="http://www.loc.gov/standards/datetime/pre-submission.html#level1">http://www.loc.gov/standards/datetime/pre-submission.html#level1</a>

Term	ISO639-2
Full Name	ISO 639-2
Definition	639-2, Codes for the representation of names of languages--Part 2: Alpha-3 code, ISO 639-2 is a code that aims to define three letter identifiers for human languages.
List of Terms	<a href="http://lcweb.loc.gov/standards/iso639-2/langhome.html">http://lcweb.loc.gov/standards/iso639-2/langhome.html</a>

Term	ISO8601
Full Name	ISO 8601:2004
Definition	An international standard covering the exchange of date and time-related data, issued by the International Organization for Standardization (ISO).
List of Terms	<a href="http://www.iso.org/iso/home/standards/iso8601.htm">http://www.iso.org/iso/home/standards/iso8601.htm</a> Summary: <a href="http://www.cl.cam.ac.uk/~mgk25/iso-time.html">http://www.cl.cam.ac.uk/~mgk25/iso-time.html</a>

Term	W3CDTF
Full Name	W3C-DTF
Definition	Defines a profile of ISO 8601, the International Standard for the representation of dates and times. <a href="http://purl.org/dc/terms/W3CDTF">http://purl.org/dc/terms/W3CDTF</a>
List of Terms	<a href="https://www.w3.org/TR/NOTE-datetime">https://www.w3.org/TR/NOTE-datetime</a>

## **VI. Crosswalks**

### **Alliance to DPLA MAP, v.4**

A detailed crosswalk between DPLA Metadata Application Profile, v.4 and data harvested from Orbis Cascade Alliance digital repositories:

[https://docs.google.com/spreadsheets/d/1eVKvh8xdoq\\_eQAsNyfLexrkijqh5CpQXPGgSVpeDlEw/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1eVKvh8xdoq_eQAsNyfLexrkijqh5CpQXPGgSVpeDlEw/edit?usp=sharing)  
(first sheet)

### **Alliance to ExLibris Primo PNX**

A detailed crosswalk between the ExLibris Primo PNX record and data harvested from Orbis Cascade Alliance digital repositories:

[https://docs.google.com/spreadsheets/d/1eVKvh8xdoq\\_eQAsNyfLexrkijqh5CpQXPGgSVpeDlEw/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1eVKvh8xdoq_eQAsNyfLexrkijqh5CpQXPGgSVpeDlEw/edit?usp=sharing)  
(second sheet)