Europeana Data Model (EDM) Template for use with University of Chicago Library Digital Collections

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1 Triple Types

All triples should be typed. Choose from among these types.

a ore:ResourceMap a ore:Aggregation a edm:ProvidedCHO

a ore:Proxy # optional

a edm: WebResource

a rdfs:Resource # This is the default type. Use it when none of the preceding apply.

Of the above, a ore:Proxy is optional, but included if we are basing the descriptive metadata in a edm:ProvidedCHO on pre-existing descriptive metadata (e.g., a cataloging record).

2 Required Elements

In this section, mandatory Europeana elements are indicated by **boldface**. Mandatory Europeana elements governed by either/or or if/then statements are indicated by *italics*. Mandatory elements required by local usage are underlined.

The following is with reference to Definition of the Europeana Data Model v5.2.8 $06/10/2017.^1\,$

 $^{^1}https://pro.europeana.eu/files/Europeana_Professional/Share_your_data/Technical_requirements/EDM_Documentation//EDM_Definition_v5.2.8_102017.pdf$

2.1 ore:ResourceMap

The following are required for an edm:ResourceMap. The requirements are indicated by example.

```
<z9m865s34c01/rem>
dcterms:creator <https://dldc.lib.uchicago.edu/>;
dcterms:created "2022-02-09T11:21:52-06:00"^^xsd:dateTime;
dcterms:modified "2022-02-09T11:21:52-06:00"^^xsd:dateTime;
ore:describes <z9m865s34c01/aggregation>;
a ore:ResourceMap.
```

Note that when an ore:ResourceMap is being created, the values of dcterms:created and dcterms:modified are the same.

2.2 ore:Aggregation

The following are mandatory Europeana elements for the ore: Aggregation.

- edm:aggregatedCHO
- edm:dataProvider
- Either edm:isShownAt or edm:isShownBy. If edm:isShownBy is used, then edm:object must be supplied. (See 3.2.27.)
- edm:provider
- edm:rights

The following is an example of an ore: Aggregation.

```
<z9m865s34c01/aggregation>
edm:aggregatedCHO <z9m865s34c01> ;
edm:dataProvider "University of Chicago Library" ;
edm:isShownBy <z9m865s34c01/file.wav> ;
edm:object <z9m865s34c01/file.wav> ;
edm:provider "University of Chicago Library" ;
edm:rights <https://rightsstatements.org/vocab/NoC-US/1.0/> ;
ore:isDescribedBy <z9m865s34c01/rem> ;
a ore:Aggregation .
```

2.3 edm:ProvidedCHO

The following are mandatory Europeana elements for the edm:ProvidedCHO.

- Either dc:description or dc:title or both. Local usage requires dc:title.
- One or more the following: dc:coverage, dcterms:spatial, dc:subject, dcterms:temporal, or dc:type. Local usage requires dcterms:spatial. Values from Getty's Thesaurus of Geographical Names (TGN) are used.
- dc:language for TEXT objects. It is strongly recommended for other object types if there is a language aspect. Language codes conforming to ISO 639 are used as values.
- edm:type must occur and must use one of the following values (in upper case): TEXT, IMAGE, SOUND, VIDEO or 3D.

In addition to what is specified above, the following are also required by local usage for the *edm:ProvidedCHO*.

- <u>dcterms:identifier</u>. String-literal values for locally-created ARK identifiers are used, e.g., "https://n2t.net/ark:61001/z9m865s34c01" (dc:identifier may be used for any original identifiers occurring in provided metadata)
- dc:date. String-literal values conforming to ISO 8601 are used.

For the following, see "DCMI Kernel Metadata Community: Kernel Metadata and Electronic Resource Citations (ERCs)", Section 3, Kernel Stories, https://www.dublincore.org/groups/kernel/spec/#anchor3. They will support responses to queries about the metadata when the appropriate syntax is provided to an ARK resolver: "ARK resolvers must support the '?info' inflection for requesting metadata." (https://datatracker.ietf.org/doc/html/draft-kunze-ark-28#section-1.2. See further in that document for the ?info inflection and the use of Electronic Resource Citations [ERCs].)

- <u>erc:who</u> The value is drawn from dc[terms]:creator, dc[terms]:contributor, or dc[terms]:publisher, in that order.
- <u>erc:what</u> The value is drawn from dc:title or dc:description, in that order.
- erc:when The value is drawn from dc:date.
- erc:where The value is drawn from dcterms:identifier.

Any values which cannot be assigned should be drawn from "DCMI Kernel Metadata Community: Kernel Metadata and Electronic Resource Citations (ERCs)", Section 9.3, Special Kernel Standardized Value Codes, https://www.dublincore.org/groups/kernel/spec/#anchor16. For a local copy see "Null Values", https://dldc.lib.uchicago.edu/dl/nullValues.html.

The following is an example of an edm:ProvidedCHO. This example does not include elements specific to a particular digital collection which may also be included in the edm:ProvidedCHO. It only includes those elements discussed in this section.

```
<z9m865s34c01>
dc:contributor "Hanks, William F.";
dc:contributor "Unnamed contributor (male)";
dc:description "Contents: \"History of Cooperativa\"";
dc:identifier "#z9m865s34c01";
dc:language "spa";
dc:language "yua" ;
dc:title "Yucatec Maya field recordings (Hanks, 1979-1987) Yucatán Maya";
dcterms:spatial "7005600";
dcterms:temporal "1979";
dcterms:identifier "https://n2t.net/ark:61001/z9m865s34c01" ;
edm:type "SOUND" ;
erc:who "Hanks, William F., interviewer; Unnamed contributor (male), consultant";
erc:what "Yucatec Maya field recordings (Hanks, 1979-1987) Yucatán Maya";
erc:when "1979";
erc:where "https://n2t.net/ark:61001/z9m865s34c01";
a edm:ProvidedCHO.
```

2.4 ore:Proxy

The following are required for an ore:Proxy, which is optional; it is used only if one is associating a file of original descriptive metadata, e.g., MARCXML or Dublin Core, with the aggregation. The requirements are indicated by example.

```
<z9m865s34c01/file.dc.xml>
dc:format "application/xml" ;
ore:proxyFor <b2nw3wm8552h> ;
ore:proxyIn <b2nw3wm8552h/aggregation> ;
a ore:Proxy .
```

Note that when an ore:ResourceMap is being created, the values of dcterms:created and dcterms:modified are the same.

2.5 edm:WebResource

The following are required for an edm:WebResource. The requirements are indicated by example. For <u>dcterms:format</u>, string-literal values conforming to Internet Media Types (MIME) are used (http://www.iana.org/assignments/media-types/).

```
<z9m865s34c01/file.wav>
dc:identifier "https://n2t.net/ark:61001/z9m865s34c01" ; # a persistent link to the red
dcterms:format "audio/x-wav" ;
premis:fixity [
   rdf:type <https://id.loc.gov/vocabulary/preservation/cryptographicHashFunctions/sha5
   rdf:value "10b1a2959f2229ab52e3873651c1d99036caa1e5d641e0bf257"] ;
premis:originalName "FieldRecording1996-2.wav" ;
premis:size 44694436 ;
a edm:WebResource .</pre>
```

2.6 rdfs:Resource

If rdfs:Resource is used, the following indicates its format. The example is for OCR data for a page object in Campus Publications.

```
<b2nw3wm8552h/00000001/file.xml>
dc:format "application/xml";
a rdfs:Resource . # This is the default type.
```

3 Example

This example consists of the required elements plus those specific to a particular digital collection. If anything in this example contradicts anything in the above, the above remains authoritative.

```
@base <https://ark.lib.uchicago.edu/ark:61001/>
@prefix ac: <http://www.audiocommons.org/ac-ontology/
   aco> .
@prefix aes60-2011: <https://www.aes.org/publications/
   standards/>
@prefix ark: <https://datatracker.ietf.org/doc/html/
   draft-kunze-ark-29/>.
@prefix audioMD: <a href="mailto://www.loc.gov/standards/amdvmd/">https://www.loc.gov/standards/amdvmd/</a>
   htmldoc/audioMD.html#>.
@prefix bf: <http://id.loc.gov/ontologies/bibframe/> .
@prefix cts: <http://marklogic.com/cts#> .
@prefix dc: <http://purl.org/dc/elements/1.1/>
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix dma: <http://lib.uchicago.edu/dma/> .
@prefix ebucore: <a href="mailto:ch/metadata/">https://www.ebu.ch/metadata/</a>
   ontologies/ebucore/> .
@prefix edm: <http://www.europeana.eu/schemas/edm/> .
@prefix erc: <http://purl.org/kernel/elements/1.1/> .
@prefix foaf: <http://xmlns.com/foaf/spec/>
@prefix http: <https://tools.ietf.org/html/rfc7230>.
@prefix lexvo: <a href="https://www.iso.org/standard/39534.html">https://www.iso.org/standard/39534.html</a>
   > .
@prefix madsrdf: <http://www.loc.gov/mads/rdf/v1#...
   http://www.w3.org/XML/1998/namespace>.
@prefix mix: <http://www.loc.gov/mix/v20/> .
@prefix olac: <http://www.language-archives.org/REC/
   role.html#>.
@prefix ore: <http://www.openarchives.org/ore/terms/> .
@prefix premis: <a href="mailto:kttps://id.loc.gov/ontologies/premis">https://id.loc.gov/ontologies/premis</a>
   -3-0-0.\text{html}>.
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-
   ns\#>.
@prefix rdfs: \langle \text{http://www.w3.org/} 2000/01/\text{rdf-schema} \# \rangle.
```

```
@prefix role: <http://id.loc.gov/vocabulary/relators/>
@prefix skos: \langle \text{http://www.w3.org/} 2004/02/\text{skos/core} \# \rangle.
@prefix tgn: \langle http://vocab.getty.edu/tgn/>.
@prefix tgno: <http://vocab.getty.edu/ontology#> .
@prefix ucla: <http://lib.uchicago.edu/ucla/> .
@prefix vra: <http://purl.org/vra/> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#>.
< z9m865s34c01/rem >
dcterms: creator <https://dldc.lib.uchicago.edu/>;
dcterms: created "2022-02-09T11:21:52-06:00"^^xsd:
   dateTime ;
dcterms: modified "2022-02-09T11:21:52-06:00"^^xsd:
   dateTime ;
ore: describes <z9m865s34c01/aggregation>;
a ore:ResourceMap .
<z9m865s34c01/aggregation>
edm:aggregatedCHO <z9m865s34c01>;
edm: dataProvider "University of Chicago Library";
edm:isShownBy <z9m865s34c01/file.way>;
edm: object \langle z9m865s34c01/file.wav \rangle;
edm: provider "University of Chicago Library";
edm: rights <a href="https://rightsstatements.org/vocab/NoC-US">https://rightsstatements.org/vocab/NoC-US</a>
   /1.0/>;
ore:isDescribedBy <z9m865s34c01/rem>;
a ore: Aggregation .
< z9m865s34c01 >
dc:contributor "Hanks, William F.";
dc:contributor "Unnamed contributor (male)";
dma: contributor
    foaf:name "Hanks, William F.";
    olac:role "interviewer"
dma: contributor [
    foaf:name "Unnamed contributor (male)";
    olac:role "consultant"
```

```
] ;
dc:description "Contents: \"History of Cooperativa\"";
dc:identifier "5548";
dc:language "spa" ;
dc:language "yua" ;
dma:language
    lexvo:iso639P3PCode "spa";
    dma: languageRole "primary"
];
dma:language [
    lexvo:iso639P3PCode "yua";
    dma:languageRole "subject"
dc: title "Yucatec Maya field recordings (Hanks,
   1979-1987) Yucatán Maya";
dc:type "PhysicalObject" ;
dcterms: rights "Restricted";
dcterms: spatial "7005600";
dcterms: temporal "1979";
dcterms: identifier "https://n2t.net/ark:61001/
   z9m865s34c01";
edm:type "SOUND" ;
erc: who "Hanks, William F., interviewer; Unnamed
   contributor (male), consultant";
erc: what "Yucatec Maya field recordings (Hanks,
   1979-1987) Yucatán Maya";
erc: when "1979";
erc: where "https://n2t.net/ark:61001/z9m865s34c01";
a edm: ProvidedCHO.
<z9m865s34c01/file.dc.xml>
dc: format "application/xml"
ore:proxyFor <b2nw3wm8552h>;
ore:proxyIn <b2nw3wm8552h/aggregation>;
a ore: Proxy .
\langle z9m865s34c01/file.wav \rangle
dcterms: format "audio/x-wav";
premis: fixity
```