

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

Charles Blair

2022-11-29

## 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.<sup>1</sup>

---

<sup>1</sup>[https://pro.europeana.eu/files/Europeana\\_Professional/Share\\_your\\_data/Technical\\_requirements/EDM\\_Documentation//EDM\\_Definition\\_v5.2.8\\_102017.pdf](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*.

- *dcterms:identifier*. 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].)

- *erc:who* The value is drawn from *dc[terms]:creator*, *dc[terms]:contributor*, or *dc[terms]:publisher*, in that order.
- *erc:what* 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 "https://n2t.net/ark:61001/z9m865s34c01" ; # a persistent link to the resource
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 dc-terms: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 dcterms:format, 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 res
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 .
```

## 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: <https://www.loc.gov/standards/amdvmd/
    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: <https://www.ebu.ch/metadata/
    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: <https://www.iso.org/standard/39534.html
    > .
@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: <https://id.loc.gov/ontologies/premis
    -3-0-0.html> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-
    ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
```

```

@prefix role: <http://id.loc.gov/vocabulary/relators/>
.
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
@prefix tgn: <http://vocab.getty.edu/tgn/> .
@prefix tgn: <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://dlcd.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.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 .

<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 .

<z9m865s34c01/file.wav>
dcterms:format "audio/x-wav" ;
premis:fixity [

```



```
    rdf:type <https://id.loc.gov/vocabulary/preservation/
      cryptographicHashFunctions/sha512> ;
    rdf:value "10
      b1a2959f2229ab52e3873651c1d99036caa1e5d641e0bf257
      "]" ;
    premis:originalName "FieldRecording1996-2.wav" ;
    premis:size 44694436 ;
    a edm:WebResource .
```