Smithsonian Institution

**EDAN Phase 1
SDLCM Documentation**

Index Metadata Model For Objects

Collections Systems & Digital Assets Division,
Office of the Chief Information Officer

Version 1.09
December 18, 2019

1   Document Purpose

This document represents the metadata model to be used by the EDAN Phase 1 [Solr-Lucene] metadata index. It has been developed as part of the Smithsonian Institution's system development life cycle management (SDLCM) processes for small to medium sized system implementation projects and should be viewed in conjunction with the EDAN Phase 1 system requirements and design documentation.

2   Revision History

Version	Event	Issue Date	Responsible Party
1.01	Initial CISMC and SIRISMC accepted draft (IMM14). Approved at the TRB Requirements Review on 12/16/2008 with no changes.	10/28/2008	George Bowman, CISMC, SIRISMC, TRB
1.02	Cleaned up all the <xml> notes, updated document format.	02/19/2009	George Bowman
1.03	Fixed online-media-type <xml> Added freetext Object Rights	03/31/2009	George Bowman
1.04	Added <geoLocation> tag for structured place terms	09/10/2009	George Bowman
1.05	Added <onPhysicalExhibit> flag Added <exhibition> block for structured exhibit data. Added <setName > example for exhibition title Added caption attribute for individual online_media links Enhanced definition and examples for online_media	08/19/2010	George Bowman
1.06	Limit record_ID to 40 characters	02/14/2012	George Bowman
	Add CSDAD, OCIO footer	03/18/2015	George Bowman
1.07	• Change <related_record_identifier> to a group field and add a label. • Reorder fields to mirror actual xml structure. • Move <geoLocation> examples to a separate document. • Added usage_flag attribute to <media> • Took out much of the description and justification – everybody gets it now.	04/19/2017	George Bowman
1.08	Add preferred_citation for both record-level and media-specific citations. Add usage_restrictions.	08/2018	George Bowman

| 1.09 | Implement standard rights codes for metadata and each individual media element:

Changes to <DescriptiveNonRepeating>:
• Add standard <metadata_usage> block
• Add <guid> for the object

Change to <IndexedStructured>
• Remove <online_media_rights>

Change to <FreeText>
• Remove <usage_restrictions> from FreeText

Changes to <online_media> block:
• Add standard <usage> block to <media> tag
• Add guid attribute to <media> tag
• Remove "rights" attribue from <media> tag: use <usage> tag instead. | 12/2019 | George Bowman |

DescriptiveNonRepeating	Description of fields	Examples
Record Type	Object is the default. Do not use this. It is mandatory for all other types. <record_type>	
Record ID (mandatory, non-repeatable)	The unique system + record ID for the record in its home system. *NOTE: this field is limited to 40 characters and should NOT be changed over time. It should be permanently associated with this record.* <record_ID>	**Ex:** siris_ari_1234 npm_1989.0496.10006 npg_AD/NPG.74.8
guid (optional, non-repeatable)	The DOI or ARK number associated with this object. <guid>	**Ex:**
Data Source (both data_source and unit_code are mandatory, non-repeatable)	The unit or project by whom the data was contributed. <data_source> <unit_code> just shorthand	**Ex:** National Air and Space Museum Archives Smithsonian Institution Libraries <unit_code>SIL
Title/Object-name (mandatory, non-repeatable) (title_sort is also mandatory, non-repeatable)	A primary or descriptive title for the object or resource. For objects or resources which have a formal title, that would be used. For other objects or resources, some concatenation of descriptive terms should be assembled that attempts to create a unique label. <title label="Title"> <title label="Object Name"> <title_sort> normalized for sorting	**Ex**: Einstein's Brier Pipe Postage stamp plate block Jan Matulka papers, 1923-1960
Record Link (non-repeatable)	Link to this record in its home system <record_link>	**Ex:** http://npgportraits.si.edu/eMusem...

DescriptiveNonRepeating	Description of fields	Examples

Metadata Usage	Usage rights statement for the metadata of this record. Presumably it would be CC0.
	
	This is not to be confused with an analogous block under online media.
	
	\<metadata_usage>
	    \<access>…\</access>
	    \<codes>…\</codes>
	    \<codes>…\</codes>
	    \<text>…\</text>
	\</metadata_usage>
	
	• usage optional
	   o access required
	   o codes optional/repeatable
	   o text optional
	
	usage.access is the standard list of access codes:
	• CC0
	• Usage conditions apply
	
	Each ocurrence of usage.codes should have ONE of the controlled list of SD609 codes
	
	usage.text is the public readable statement
		Ex:
		In almost all cases this would look like this:
		
		\<metadata_usage>
		    \<access>CC0\</access>
		\</metadata_usage>

| Online Media Group (non-repeatable) | Any associated <u>online media</u> URLs

<online_media mediaCount="[how many <media> tags]">
    <media type="…"
        thumbnail="[thumbnail link]"
        caption="…"
        usage_flag="…"
        preferred_citation="…"
        guid="…">
        <usage>
            <access>…</access>
            <codes>…</codes>
            <codes>…</codes>
            <text>…</text>
        </usage>
      [link to media]
    </media>
    <media type="…"
        thumbnail="[thumbnail link]"
        caption="…"
        usage_flag="…"
        preferred_citation="…"
        guid-"…">
        <usage>
            <access>…</access>
            <codes>…</codes>
            <codes>…</codes>
            <text>…</text>
        </usage>
      [link to media]
    </media>
    …
</online_media>

NOTE:
• type   required
• thumbnail   required
• preferred_citation optional
• usage_flag   optional
• guid   optional
• usage   optional
   °   access   required
   °   codes   optional/repeatable
   °   text   optional

usage.access is the standard list of access codes:
• CC0
• Usage conditions apply

Each ocurrence of usage.codes should have ONE of the controlled list of SD609 codes

usage.text is the public readable statement

If the preferred_citation in the media element is absent the record_level preferred_citation will be shown in its place.

With the exception of "Exhibition Website" where the link points to an online exhibition in which this object is included, this link must point to a resource ABOUT THIS OBJECT, not a larger group of | **link Ex:**
Image:
http://sirismm.si.edu/siahistory/imagedb/76-7008.16.jpg

Finding aid:
http://siarchives.si.edu/findingaids/FARU0347.htm

Exhibit website:
http://wintercounts.si.edu/

Section of an audio tour
http://audio-file-link#marker

Section of a video tour
http://video-file-link#marker

type Ex:
Images
Finding aids
Transcripts
Sound recordings
Online exhibits
Online publications
Online collections
Exhibit website
Video files |

DescriptiveNonRepeating	Description of fields	Examples
	objects. For example, an audio-tour for an entire exhibit would not be appropriate unless it has a position marker for the discussion of this object. Usage_flag is for local information about how this media file can be used, for example, whether it has text that is transcribable or not.	

indexedStructured (facets)	Description of fields	Examples
Facet fields are access points from authorized vocabulary lists. The point is that they overlap across records and ideally record types. The content may be repeated in the freetext portion to display on the record.		
Online Media Type	Any types of associated <u>online media</u> associated with this record, using authorized terms. This is included to enable users to scope searches only to records with a specified kind of online media. <online_media_type>	**Ex:** Images Finding aids Transcripts Sound recordings Online exhibits Online publications Online collections
Rights for Online Media File	Ideally we will have standard terms. This is included to enable users to scope searches only to images without copyright restrictions. <online_media_rights>	**Ex:** No Restrictions Restrictions May Exist Restrictions Exist
Usage Flag	Short codes to group records into project sets so an external applications can be locked down to specific sets of records. <usage_flag>	**Ex:** SPI LVM
Object Type	The categories of the object or resource. This includes • Form/Genre • Type Specimen Status <object_type>	**Ex**: book painting diary artificial heart artifacts holotype
Language	Any languages from vocabulary lists. <language>	**Ex**: French Chinese Hindi Navajo
Topic	Any topics from vocabulary lists. <topic>	**Ex**: Federal aid to the arts Airplanes, Military African American history Mother & Child World War, 1939-1945 1876: A Centennial Exhibition
Place	Any places from vocabulary lists. Separate elements for each term. <place>	**Ex**: Africa India Red Sea Maryland Baltimore Silver Spring
Date	Any dates in a normalized form. <date>	**Ex**: 1870s 1910s 1950s

indexedStructured (facets)	Description of fields	Examples
Name	Any people, groups (except cultures), titled presentations (exhibitions, expeditions) associated with the object or resource, from vocabulary lists. <name>	**Ex:** Calder, Alexander Washington, George Apple Computer Hyde Exploring Expedition
Culture	Any culture terms from vocabulary lists. <culture>	**Ex**: Dogon (African people) Limba (African people) Kiowa Indians Cheyenne Indians

geoLocation	One geoLocation per place, with as many levels filled in as possible. Fill in coordinates if available. This is redundant to the <place> element, but in a form to support a hierarchical display in the form of a map.
	
	<geoLocation>
	    <**L1** type=[Continent | Ocean]>
	    <**L2** type=[Country | Nation | Sea | Gulf | Bay | Sound]>
	    <**L3** type=[State | Province | Department | Country | District | Republic | Sea | Gulf | Bay]>
	    <**L4** type=[County | Island]>
	    <**L5** type=[City | Town]>
	    <**Other** type = [anything: examples = Neighborhood, Street, Desert, Park, etc.]>
	        <points label=[text] dates="yyyy-yyyy">
	            <point>
	                <latitude type=[decimal | degrees]>
	                <longitude type=[decimal | degrees]>
	            </point>
	            <point>
	                <latitude type=[decimal | degrees]>
	                <longitude type=[decimal | degrees]>
	            </point>
	            <point>
	                <latitude type=[decimal | degrees]>
	                <longitude type=[decimal | degrees]>
	            </point>
	        </points>
	</geoLocation >
	
	The geoLocation processor will attempt to fill in missing levels by matching as many pieces as possible to geoNames. If you really don't know what you have, just submit <geoLocation><Other>Where am I</Other><geoLocation>
		Ex.
		<geoLocation>
		  <**L1** type="Continent">
		    North America
		  <**L2** type="Country">
		    United States
		  <**L3** type="District">
		    District of Columbia
		  <**L5** type="City">
		    Washington
		  <**Other** type="Neighborhood">
		    Adams Morgan
		</geoLocation>
		
		<geoLocation>
		  <**L1** type="Ocean">
		    Pacific
		  <**L2** type="Country">
		    United States
		  <**L3** type="State">
		    Hawaii
		  <**L4** type="Island">
		    Hawaii
		  <**Other** type="Park">
		    Volcanoes National Park
		</geoLocation>
		
		See appendix for examples

On Physical Exhibit	An indication that the object is currently on display for the public. <onPhysicalExhibit>	**Ex:** Yes

indexedStructured (facets)	Description of fields	Examples

Exhibition	Structured data about this object in an exhibit. Most of this will not be display in collections.si.edu [use freetext for display], however it will be output with the <exhibition> block for other applications using the Metadata Delivery Service, potentially for something like a virtual gallery tour.
	
	NOTE: this is not a historical record. Current and future exhibitions only!
	
	\<exhibition>
	    \<exhibitionTitle>
	    \<exhibitionType>
	    \<building>
	    \<room>
	    \<displayUnit>
	    \<externalLink type="audio, etc.">
	    \<exhibitionCurator>
	    \<exhibitionOrganizer>
	    \<exhibitionSponsor>
	    \<exhibitionLabel>
	\</exhibition >
	
	The external Link is for THIS OBJECT IN THIS EXHIBIT. To include an audio- or video-tour link on an object record, the link MUST point to a position marker in the audio/video file where this object is discussed.
	\<externalLink type="audio">http://audio-file-link#marker
		Ex.
		\<exhibitionTitle>
		    A Brave New World, August 9, 2010 – August 29, 2010 (use dates as appropriate)
		
		\<exhibitionType>
		    A controlled list
		    • Online Exhibit
		    • Smithsonian exhibition
		    • Traveling exhibition
		    • Loan
		    • ¿?
		
		\<building>
		    Sackler Gallery
		\<room>
		    Gallery 13
		\<displayUnit>
		    Case 10
		
		\<externalLink>
		    A controlled list
		    • exhibitWebsite
		    • audio
		    • video
		    • image
		    • URL

Related Record	For 'redirecting' to the related record(s) with the matching identifier.This could be used for
	
	• Taxonomy → Specimen
	• Art Inventories → SAAM objects
	• Parts → Whole
	• Illustrations → Objects
	• Bibliographies → Books & Articles
	• Collection descriptions → Finding Aids
	
	The blurb will describe the relationship in readable terms. The thumbnail and title are copied from the related record, for expedience. For anything else the related record will need to be searched.
	
	\<related_record label="xxx">
	    \<blurb>
	    \<related_record_ID>
	\</related_record>
		Ex:
		
		\<related_record label="Related record"
		    \<blurb>Copied from\</blurb>
		    \<related_record_ID>SAAM_123\</related_record_ID>
		\</related_record>
		
		\<related_record label="Freer's purchases">
		    \<blurb>Purchased on X date\</blurb>
		    \<related_record_ID>fsg_F1907.283\</related_record_ID>
		\</related_record>

indexedStructured (facets)	Description of fields	Examples
Taxon-Kingdom	Taxonomic terms for Kingdom <tax_kingdom>	**Ex:** Animalia Plantae Fungi Protista Archaea Eubacteria
Taxon-Phylum	Taxonomic terms for Phylum <tax_phylum>	**EX:** Chordata Arthropoda
Taxon-Division	Taxonomic terms for Division <tax_division>	**Ex:** Magnoliophyta
Taxon-Class	Taxonomic terms for Class <tax_class>	**Ex:** Chondrichthyes Aves Malacostraca
Taxon-Order	Taxonomic terms for Order <tax_order>	**Ex:** Orectolobiformes Lamniformes Passeriformes Decapoda
Taxon-Family	Taxonomic terms for Family <tax_family>	**Ex:** Rhincodontidae Cetorhinidae Vireonidae
Tabxon-Sub-Family	Taxonomic terms for sub-family if one exists <tax_sub-family>	**Ex:** Bambusoideae Etmopterinae Imbricariinae
Scientific_name	Taxonomic terms for genus and species <scientific_name>	**Ex:** Rhincodon typus Cetorhinus maximus Vireo philadelphicus
Common name	Common names <common_name>	**Ex:** basking shark blue crab Philadelphia Vireo
Geo-age-Era	Geological Age Era <geo_age-era>	**Ex:** Archean Cenozoic Mesozoic Proterozoic
Geo-Age-System	Geological Age System <geo_age-system>	**Ex:** Eoarchean Mesoarchean Neoarchean

indexedStructured (facets)	Description of fields	Examples
Geo-Age-Series	Geological Age Series <geo_age-series>	**Ex:** Holocene Miocene Pleistocene Plio-Pleistocene
Geo-Age-Stage	Geological Age Stage <geo_age-stage>	**Ex:** Aptian Changhsingian Norian
Strat-Group	Stratigraphy Group <strat_group>	**Ex:** Absaroka Volcanic Super Group Admire Group Allegheny Group
Strat-Formation	Stratigraphy Formation <strat_formation>	**Ex:** Harpersville Fm Inferior Oolite Fm Pottsville Fm
Strat-Member	Stratigraphy Member <strat_member>	**Ex:** Francis Creek Sh Mbr Black Creek Coal Bed Jefferson Coal Bed

FreeText Fields	Description of fields	Examples
Identifier	Any ID_numbers, etc., necessary to identify the object or resource <freetext category="identifier" label="Accession #"> <freetext category="identifier" label="Catalog #">	**Ex**: 1989.0496.10006

Physical Description	A description of the way the object or resource looks, its physical characteristics, how it was prepared, etc., and the manner in which the described materials are subdivided into smaller units. This includes:
	• Orientation/arrangement
	• Physical Description
	   o Format/Extent
	   o Sex/Age/Weight/Size
	   o Processes & Techniques
	   o Storage medium/regime
	   o Dimensions
	
	<freetext category="physicalDescription"
	    label="Physical description">
	
	<freetext category="physicalDescription" label="Dimensions">
	
	<freetext category="physicalDescription" label="Medium">
		Ex:
		3.37 cu. ft. (3 document boxes) (1 12x17 box) (4 5x8 boxes)
		1 photonegative: glass; 5 x 7 in
		4 linear meters and 5 microfilm reels
		Carpet is of Kilim type
		3 adult male skulls
		Preparation: Alcohol (Ethanol)
		New Coccine (or Crocein Scarlet) dye
		Autochrome process
		Blueprint process
		Cibachrome ™
		
		5 x 7 in
		
		metal: Bronze
		Pencil and india ink on board
		Paper, ink, gum

Gallery Label	Text of Exhibition label <freetext category="galleryLabel" label="Gallery Label"> <freetext category="galleryLabel" label="Tombstone">	

FreeText Fields	Description of fields	Examples
Notes	A textual description of the object or resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources. This includes any other information to account for the complexity of the object, such as: • Style • Iconography • Original citation of type specimen • Biographical & Historical Context This also includes any non-controlled terms for any other element, such as • Ecological info • Ocean Depth • Era This may also include a description of a current or future exhibit containing this object, including title, dates if appropriate, location, curator, organizer, sponsor, etc. NOTE: this is not a historical record – current and future exhibitions only! <freetext category="notes" label="Notes"> <freetext category="notes" label="Summary"> <freetext category="notes" label="Iconographic analysis"> <freetext category="notes" label="Exhibition Details">	**Ex**: Wooden baseball bat used by Stan Musial during the 1957-1958 baseball season and used to break the 3000 hit goal. Soon after the first federal duck stamp appeared in 1934, states began issuing their own hunting stamps.
Publisher	For publications: the name of the publisher or distributor and any qualifying terms, such as an indication of function. <freetext category="publisher" label="Publisher"> <freetext category="publisher" label="Distribution"> <freetext category="publisher" label="Location">	**Ex:** Rand McNally U.S. Dept. of Agriculture, Forest Service Gauthier-Villars (distributor)
Object Type	The categories of the object or resource. <freetext category="objectType" label="Type">	**Ex**: book painting diary holotype Dead letter office materials
Taxonomic Name	Any taxonomic terms associated with the object or resource. <freetext category="taxonomicName" label="Taxonomy">	**Ex**: Cephalopoda—Sepiidae—Sepia-officinalis Cetacea Cephalopoda—Ommastephidae—Dosidicus—gigas
Language	Any languages represented by the object or resource. <freetext category="language" label="Language">	**Ex**: French Chinese Hindi Navajo Forward in French with indexes in French and German

FreeText Fields	Description of fields	Examples
Topic	The topical access points of the object or resource. <freetext category="topic" label="Topic">	**Ex**: Federal aid to the arts Airplanes, Military African American history Mother & Child World War, 1939-1945 1876: A Centennial Exhibition
Place	Any places associated with the object or resource. <freetext category="place" label="Place"> <freetext category="place" label="Country"> <freetext category="place" label="Site">	**Ex**: Africa India Red Sea Maryland Baltimore, Maryland Maryland--Silver Spring Site 16 IV 149 -- archeology
Date	Any dates associated with the object or resource. <freetext category="date" label="Date">	**Ex**: 1870-1873 June 10, 1910 Installed, May 2, 1952
Name	Any people, groups (except cultures), titled presentations (exhibitions, expeditions) associated with the object or resource. <freetext category="name" label="Author"> <freetext category="name" label="Creator"> <freetext category="name" label="Artist"> <freetext category="name" label="Maker"> <freetext category="name" label="Sitter" role="sitter">	**Ex:** Calder, Alexander, 1898-1976, painter Washington, George, 1732-1799, sitter Apple Computer Hyde Exploring Expedition
Culture	Any cultures represented by the object or resource. <freetext category="culture" label="Culture"> <freetext category="culture" label="Nationality">	**Ex**: Dogon (African people) Limba (African people) Kiowa Indians Cheyenne Indians
Set Name	Any collection names or set name of logical group of object or resource. Consistency is important: This may be used to search for all items in the same collection, i.e., with an exact text match. <freetext category="setName" label="See more items in"> <freetext category="setName" label="On exhibit">	**Ex**: Ivory Soap Advertising Collection 1883-1998. Garden Club of America Collection. (An exhibition) A Brave New World, August 9, 2010 – April 24, 2011
Data Source	The unit or project by whom the data was contributed. <freetext category="dataSource" label="Data Source">	**Ex:** National Air and Space Museum Archives Smithsonian Institution Libraries
Credit Line	A brief statement indicating how the work came into the current collection. <freetext category="creditLine" label="Credit line">	**Ex:** National Portrait Gallery, Smithsonian Institution; acquired as a gift to the nation through the generosity of the Donald W. Reynolds Foundation.

FreeText Fields	Description of fields	Examples
Preferred Citation	The preferred citation to be shown with media files lacking a file-specific preferred_citation. <preferred_citation> <label>Cite as</label> <content>xxxxx</content> </preferred_citation>	**Ex:** Metropolitan Museum of Art, 2014
Usage Restrictions	A statement regarding the usage of any media files, ideally including SI contact information. <usage_restrictions> <label>Terms & Restrictions</label> <content>xxxxx</content> </usage_restrictions>	**Ex:** Reproduction and/or publication is forbidden. To be used for study purposes only. Contact: Archives of American Art, Smithsonian Institution, Washington, D.C. 20560 Most items available for reproduction. Contact: Smithsonian Institution, National Museum of American History : Archives Center. P.O. Box 37012, Suite 1100, MRC 601, Constitution Ave., between 12th and 14th Sts., N.W., Washington, D.C. 20013-7012. Call 202-633-3270 for appointment. Fax: 202-786-2453. Authorization to publish, quote or reproduce must be obtained from: Thomas W. Brunk, 2954 Burns, Detroit, Michigan 48214
Object Rights	A brief statement describing rights applicable to the object, not the digital file. <freetext category="objectRights" label="Rights">	**Ex:** (c) Edward Smith, 1957.