

# Getty Vocabularies Technical Update

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# Data Loads in the past year

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5000 Chinese translated concepts (AAT)

1200 Dutch translated concepts (AAT)

Getty Provenance artists, owners and houses (ULAN)

- Overall effort to align Getty data sets with Vocabularies
- Pilot program to find a method for keeping contributor data sets synched with Vocabulary changes

Reconciliation of multiple internal data sets at the Getty

# Getty Vocabularies Publications and Formats

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Currently available:

- Human-readable web site and search (<http://www.getty.edu/research/tools/vocabularies/>)
- Yearly full export in XML and Relational Tables (<http://www.getty.edu/research/tools/vocabularies/obtain/download.html>)
- Legacy Web services returning XML format ([http://www.getty.edu/research/tools/vocabularies/vocab\\_web\\_services.pdf](http://www.getty.edu/research/tools/vocabularies/vocab_web_services.pdf))
- Linked Data with SPARQL endpoint (<http://vocab.getty.edu>)

# Learn SPARQL!

<http://vocab.getty.edu/queries>

← → ↻ vocab.getty.edu/queries#Finding\_Subjects

**Getty Vocabularies: LOD** SPARQL Queries Any   Brief

- 1.2.1 Version 3.0
- 1.2.2 Version 3.1
- 1.2.3 Version 3.2
- 1.2.4 Version 3.3
- 1.2.5 Version 3.4
- 2 Finding Subjects**
  - 2.1 Top-level Subjects
  - 2.2 Descendants of a Given Parent
  - 2.3 Subjects by Contributor Id
  - 2.4 Subjects by Contributor Abbrev
  - 2.5 Preferred Ancestors
  - 2.6 Full Text Search Query
  - 2.7 Stop-Word Removal
  - 2.8 Case-insensitive Full Text Search Query
  - 2.9 Exact-Match Full Text Search Query
  - 2.10 Find Person Occupations by broaderExtended
  - 2.11 Find Person Occupations by Double FTS
  - 2.12 Find Quartz Timepieces by Double FTS
  - 2.13 Find Subject by Exact English PrefLabel
  - 2.14 Find Subject by Language-Independent PrefLabels
  - 2.15 Combination Full-Text and Exact String Match
  - 2.16 Find Subject by Any Label
  - 2.17 Find Ordered Subjects
  - 2.18 Find Ordered Collections
  - 2.19 Get Subjects in Order
  - 2.20 Find Contributors by Vocabulary
  - 2.21 Find Sources by Vocabulary
- 3 Getting Information
  - 3.1 All Data For Subject
  - 3.2 All Data for Terms of Subject
  - 3.3 Subject Preferred Label
  - 3.4 Preferred and Vernacular Terms
  - 3.5 Historic Information on Relations
  - 3.6 Historic Information of Terms
  - 3.7 Preferred Terms for Contributors
  - 3.8 Preferred Terms for Sources
  - 3.9 Concepts Related by Particular Associative Relation
  - 3.10 Recently Created Subjects
  - 3.11 Recently Modified Subjects
  - 3.12 Recent Revision Actions
  - 3.13 OpenRefine Reconciliation Service

Query:

```
1 select * {?f a gvp:Facet; skos:inScheme aat: ; gvp:prefLabelGVP/xl:literalForm ?l}
```

Include inferred  
 Expand results over equivalent URIs

## 2 Finding Subjects

### 2.1 Top-level Subjects

The top-level Subjects of AAT are gvp:Facets, so the query is easy:

```
select * {?f a gvp:Facet; skos:inScheme aat: ; gvp:prefLabelGVP/xl:literalForm ?l}
```

The same holds of TGN (there's only two: World and Extraterrestrial Places):

```
select * {?f a gvp:Facet; skos:inScheme tgn: ; gvp:prefLabelGVP/xl:literalForm ?l}
```

The same holds of ULAN (there are 5 facets, see [ULAN Hierarchy and Classes](#)):

```
select * {?f a gvp:Facet; skos:inScheme ulan: ; gvp:prefLabelGVP/xl:literalForm ?l}
```

### 2.2 Descendants of a Given Parent

Let's look for AAT descendants of 300194567 "drinking vessels". This finds "rhyta" and other interesting records, including "Fichtelgebirgehumpen":

```
select * {?x gvp:broaderExtended aat:300194567; skos:inScheme aat: ; gvp:prefLabelGVP/xl:literalForm ?l}
```

### 2.3 Subjects by Contributor Id

You can easily find subjects contributed by a particular Contributor if you know the id. E.g. the Getty Conservation Institute (GCI) in AAT is aat\_contrib:10000088. Let's find their contributions to aat:300033618 paintings (visual works):

```
select * {  
  ?x a gvp:Subject; dct:contributor aat_contrib:10000088;  
  gvp:broaderExtended aat:300033618;  
  gvp:prefLabelGVP/xl:literalForm ?l}
```

# CONSTRUCT Queries

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SPARQL queries that can do complete transformations of an entire graph

Allows users to produce “flattened” subsets of information for specific applications

Formats such as JSON-LD provide further opportunities for data framing

# get all facets as top concepts

```
CONSTRUCT {  
  aat: skos:hasTopConcept ?f.  
  aat: a ?t  
} WHERE {?f a gvp:Facet; skos:inScheme aat:.  
aat: a ?t  
}
```

# OpenTheso Example

OpenTheso – web-based, open-source tool for Thesaurus management developed at the CNRS (National Center for Scientific Research - France)

CONSTRUCT queries used to produce RDF/XML format for loading into system

```
<?xml version="1.0" encoding="UTF-8"?>
<rdf:RDF
  xmlns:skos="http://www.w3.org/2004/02/skos/core#"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dct="http://purl.org/dc/terms/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema#"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">

  <rdf:Description rdf:about="http://vocab.getty.edu/aat/">
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264086"/>
    <rdf:type rdf:resource="http://www.w3.org/2004/02/skos/core#ConceptScheme"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264088"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264089"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264090"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264091"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264092"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300343372"/>
    <skos:hasTopConcept rdf:resource="http://vocab.getty.edu/aat/300264087"/>
  </rdf:Description>
  <rdf:Description rdf:about="http://vocab.getty.edu/aat/300189559">
    <skos:prefLabel xml:lang="en">male</skos:prefLabel>
    <skos:prefLabel xml:lang="zh-hant">雄性</skos:prefLabel>
    <skos:prefLabel xml:lang="zh-latn-pinyin-x-hanyu">xióng xìng</skos:prefLabel>
    <skos:prefLabel xml:lang="zh-latn-pinyin-x-notone">xiong xing</skos:prefLabel>
    <skos:prefLabel xml:lang="zh-latn-wadegile">hsiung hsing</skos:prefLabel>
    <skos:prefLabel xml:lang="nl">mannelijk</skos:prefLabel>
    <skos:prefLabel xml:lang="es">masculino</skos:prefLabel>
```

# Getty Vocabularies Online Search

<http://www.getty.edu/research/tools/vocabularies/>

## Getty Thesaurus of Geographic Names® Online

Search the TGN [? Help](#)

Find Name or ID:  [Search](#)

Place Type:  [Clear](#)

[Lookup](#)

Nation:

[Lookup](#)

[Pop-up Search](#) [Browse the TGN hierarchies](#)

## Art & Architecture Thesaurus® Online

Search the AAT [? Help](#)

Find Term or ID:  [Search](#)

AND  OR [Clear](#)

Note:

[Pop-up Search](#) [Browse the AAT hierarchies](#)

## Union List of Artist Names® Online

Search the ULAN [? Help](#)

Find Name or ID:  [Search](#)

Role:  [Clear](#)

[Lookup](#)

Nationality:

[Lookup](#)

[Pop-up Search](#) [Browse the ULAN hierarchies](#)

# Getty Vocabularies Online Updated CONA and IA Search

## Cultural Objects Name Authority<sup>®</sup> Online

Search CONA [? Help](#)

Find Title or ID:  [Search](#)

Work Types:  [Clear](#)

AAT Lookup

Creator, etc.:

ULAN Lookup

Material:

AAT Lookup

Location/  
Repository:   number

ULAN Lookup

Geographic:   
(Does not include works in repositories)

TGN Lookup

Creation Date Range: start year  end year

General Subject:

Lookup

Specific Subject:

[AAT Lookup](#) [ULAN Lookup](#) [TGN Lookup](#) [IA Lookup](#)

<http://www.getty.edu/research/tools/vocabularies/cona/>

## Search the Iconography Authority (IA)

Iconography:

[Browse IA hierarchies](#)



# Getty Vocabularies Online Updated CONA Search

## Cultural Objects Name Authority<sup>®</sup> Online

Search CONA [? Help](#)

Find Title or ID:  [Search](#)

Work Types:  [Clear](#)

[AAT Lookup](#)

Creator, etc.:

[ULAN Lookup](#)

Material:  [AAT Lookup](#)

Location/Repository:

[ULAN Lookup](#)

Geographic:   
(Does not include works in repositories)

[TGN Lookup](#)

Creation Date Range: start year  end year

General Subject:  [Lookup](#)

Specific Subject:

[AAT Lookup](#) [ULAN Lookup](#) [TGN Lookup](#) [IA Lookup](#)

Free text search criteria is cross-referenced with matching AAT concepts

Criteria: **Material=gold**

1049 results

First Previous Next

- [A Battle from the Trojan War](#)  
detached leaf; Unknown French (French Scribe); First Master of the Bible hi...; about 13  
Getty Museum at the Getty Center (Los Angeles, Los A...; 83.MP.146.3.recto (Histoire a  
Movable Works by class: drawings, paintings, prints, other two-dimensional media, Mov  
[700006395]  
Histoire ancienne jusqu'à César  
Leaf from Ancient History up to the Reign of Caesar
- [A Blackbird](#)  
folio (leaf); Unknown Franco-Flemish (Franco-Flemish Illuminator); fourth quarter of 13  
Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mundi;  
Works by class: drawings, paintings, prints, other two-dimensional media, Movable Wor  
De Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mu
- [Abraham and the Three Angels](#)  
folio (leaf); Master of James IV of Scotland (Flemish, before 1465 - about...; about 151  
Museum at the Getty Center (Los Angeles, Los A...; 83.ML.114.11; Ms. Ludwig IX 18, fo  
Movable Works by class: drawings, paintings, prints, other two-dimensional media, Mov  
[700002604]  
Abraham and the Three Angels: Spinola Hours
- [A Caladrius Bird](#)  
folio (leaf); Unknown Franco-Flemish (Franco-Flemish Illuminator); fourth quarter of 13  
Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mundi;  
Works by class: drawings, paintings, prints, other two-dimensional media, Movable Wor  
De Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mu

# Getty Vocabularies Online Updated CONA Search

## Cultural Objects Name Authority<sup>®</sup> Online

Search CONA

[? Help](#)

Find Title or ID:

[Search](#)

Work Types:

[Clear](#)

[AAT Lookup](#)

Creator, etc.:

[ULAN Lookup](#)

Material:

[AAT Lookup](#)

Location/

number

Repository:

[ULAN Lookup](#)

Geographic:

[TGN Lookup](#)

(Does not include works in repositories)

Creation Date

start year    end year

Range:

General Subject:

[Lookup](#)

Specific Subject:

[AAT Lookup](#) [ULAN Lookup](#) [TGN Lookup](#) [IA Lookup](#)

Specific AAT record selected using the lookup does a narrower hierarchy expansion

Criteria: **Material=gold (metal) [300011021]**

966 results

[First](#)

[Previous](#)

[Next](#)

- [A Battle from the Trojan War](#)  
detached leaf; Unknown French (French Scribe); First Master of the Bible hi...; about 1390 -  
Getty Museum at the Getty Center (Los Angeles, Los A...; 83.MP.146.3.recto (Histoire ancien  
Movable Works by class: drawings, paintings, prints, other two-dimensional media, Movable V  
[700006395]  
Histoire ancienne jusqu'à César  
Leaf from Ancient History up to the Reign of Caesar
- [A Blackbird](#)  
folio (leaf); Unknown Franco-Flemish (Franco-Flemish Illuminator); fourth quarter of 13th ce  
Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mundi; On t  
Works by class: drawings, paintings, prints, other two-dimensional media, Movable Works) [7  
De Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mundi; C
- [A Caladrius Bird](#)  
folio (leaf); Unknown Franco-Flemish (Franco-Flemish Illuminator); fourth quarter of 13th ce  
Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mundi; On t  
Works by class: drawings, paintings, prints, other two-dimensional media, Movable Works) [7  
De Natura Avium; De Pastoribus et Ovibus; Bestiarium; Mirabilia Mundi; Philosophia Mundi; C
- [A Crane](#)  
folio (leaf); Unknown Franco-Flemish (Franco-Flemish Illuminator); fourth quarter of 13th ce

# Reconciliation – Connecting to the Getty Vocabularies

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The Getty Vocabularies provide identities for cultural heritage concepts, people and places

The process of linking institutional metadata to Getty Vocabularies entities is called *Reconciliation*

Recent projects have focused on performing reconciliation with internal Getty datasets with the added benefit of providing better tools and processes to all users

Future systems will increase usability for researchers and application developers

# Reconciliation of Getty Museum Classifications, Mediums, Places, and Artists

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Custom code using Oracle master database

Cascading set of search techniques – normalized, text, exact

Use of birth/death dates for artist names

Approximately 1/3 with single matches; reports of multiple matches and zero matches delivered to program

# Getty Museum Mediums Output Example (multiple matches)

Object Name	AAT ID	AAT Pref Term	Scope Note	Hierarchy
Architecture	300263552	architecture (object genre)	Structures or parts of structures that are the result of conscious construction, are of practical	(object genres, Object Genres, Objects Facet)
	300054156	architecture (discipline)	The art or science of designing and building structures, especially habitable structures, in ac	(visual arts, arts, <arts and related disciplines>,<
Base	300226835	bases (skirts)	Flared and pleated skirts of cloth, often velvet or brocade, or of mail or plate metal, worn ov	(<body armor for lower extremities>, body arm
	300237910	base (substance)	In chemistry, any compound that in water solution is slippery to the touch, tastes bitter, turr	(<materials by property>, materials, Materials,<
	300015297	ground (material)	Substance used to prepare the surface on which or from which an image is made.	(surface preparation materials, <materials by fu
	300387201	bases (operational centers)	Administrative centers of operation. Used often to refer to military headquarters or installa	(<complexes by function>, complexes, Built Co
	300001656	bases (object components)	Elements at the bottoms of structures or objects upon which the upper parts rest or are supp	(<components by general context>, component
	300404431	base (relationship indicator)	The element serving as the reference point in an equation or ratio of size, dimensions, or of	(<size/dimensions by general type>, size/dime
	300043034	cruet stands	Trays or small receptacles for holding two or more small bottles or other vessels for ceremon	(<accessory containers for food service>, <cont
	300299018	base		(iccd objects, <ICCD Objects>, <temp.parent/ca
	300039767	stands (support objects)	Objects designed to support or display another object; examples are small tablelike pieces c	(support furniture, <furniture by form or functi
Beam	300263647	beams (supporting equipment)	In the hand working of hides and skins, convex slabs, typically wooden, sloping upwards fro	(supporting equipment, <equipment by proces
	300251460	beams (tanning equipment)	Sloping boards or frames upon which hides are worked in tanning.	(<hide and skin treating equipment>, <equipm
	300001497	beams (structural elements)	Structural members whose primary function is to carry transverse loads.	(<spanning and projecting structural elements>
	300195832	beams (balance components)	Crossbars of balances, from the ends of which the pans or baskets are suspended.	(scale components, measuring device compone
Brick	300410346	bricks (visual works)	Objects made of brick, particularly those having a design or image impressed, carved, or pai	(<visual works by form>, visual works, Visual W
	300010463	brick (clay material)	Clay or clay products formed into a rectangular block and hardened by drying in the sun or fi	(<clay by product>, clay, inorganic material, <m
	300311462	brick red (color)	Variable orange colors resembling the color of bricks, which are typically rectangular clay pr	(variable orange colors, orange colors, chroma
Capital	300387218	capitals (seats of government)	Principal centers of any size that are seats of government for an administrative area, includi	(<settlements by function: administrative>, <se
	300001662	capitals (column components)	The uppermost members of columns, piers, or pilasters.	(<capitals and capital components>, column co
	300138242	capital (economic concept)	Accumulated goods and financial resources devoted to the production of other goods or to g	(economic concepts, social science concepts, A
Column	300200012	columns (layout features)	Vertical lists of items or vertical sections into which the text of a manuscript or printed page	(layout features, information form components
	300026441	newspaper columns	Written articles appearing regularly in a series in a newspaper.	(articles, <documents by conditions of producti
	300001571	columns (architectural elements)	In the discipline of architecture, refers to cylindrical or slightly tapering, vertical members n	(<columns and column components>, <support

# Current Reconciliation Tools

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Individual searches on Vocabularies web pages

- Human search and retrieval of Vocabulary records
- Hierarchy visualization and search

Legacy XML web services ([http://www.getty.edu/research/tools/vocabularies/vocab\\_web\\_services.pdf](http://www.getty.edu/research/tools/vocabularies/vocab_web_services.pdf))

- Search imitates the behavior of Vocabs on the Web search pages
- Return format of XML in Getty Vocabulary Program custom schema definition

SPARQL endpoint at Vocabularies LODsite (<http://vocab.getty.edu/sparql>)

- SKOS-based entity descriptions
- Lucene text index

OpenRefine (<http://openrefine.org>)

# Reconciliation with OpenRefine

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Use SPARQL endpoint to return entity IDs in JSON format

Resources:

- Vocabularies LOD Sample queries page (<http://vocab.getty.edu>)
- Using OpenRefine with the Getty Vocabularies LOD tutorial ([www.getty.edu/research/tools/vocabularies/garcia\\_open\\_refine.pdf](http://www.getty.edu/research/tools/vocabularies/garcia_open_refine.pdf))

127.0.0.1:3333/project?project=1844835252820 Search Open...

**Refine** TMSFields.xlsx Permalink Open...

Facet / Filter Undo / Redo **10 rows**

Show as: rows records Show: 5 10 25 50 rows « first « previous

### Using facets and filters

Use facets and filters to select subsets of your data to act on. Choose facet and filter methods from the menus at the top of each data column.

Not sure how to get started?  
[Watch these screencasts](#)

### Add column by fetching URLs based on column Column 1

New column name  Throttle delay  milliseconds

On error  set to blank  store error

**Formulate the URLs to fetch:**

Expression Language  No syntax error.

```
'http://vocab.getty.edu/sparql.json?query=select+distinct*  
{?x+skos:inScheme+aat;:(xl:prefLabel|xl:altLabel)/gvp:term"' +  
escape(toLowercase(trim(value)), 'url') + "'@en}'
```

**Preview** History Starred Help

row	value	'http://vocab.getty.edu/sparql.json?query=select+distinct* {?x+skos:inScheme+aat;:(xl:prefLabel xl:altLabel)/gvp:term"' + escape(toLowercase(trim(value)), 'url') + "'@en}'
1.	Sling-bullets	http://vocab.getty.edu/sparql.json?query=select+distinct*{?x+skos:inScheme+aat;:(xl:prefLabel xl:altLabel)/gvp:term"sling-bullets"@en}
2.	Finials	http://vocab.getty.edu/sparql.json?query=select+distinct*{?x+skos:inScheme+aat;:(xl:prefLabel xl:altLabel)/gvp:term"finials"@en}
3.	Scaraboids	http://vocab.getty.edu/sparql.json?query=select+distinct*{?x+skos:inScheme+aat;:(xl:prefLabel xl:altLabel)/gvp:term"scaraboids"@en}

OK Cancel



Facet / Filter

Undo / Redo 7

## Using facets and filters



Use facets and filters to select subsets of your data to act on. Choose facet and filter methods from the menus at the top of each data column.

Not sure how to get started?

[Watch these screencasts](#)

25 rows

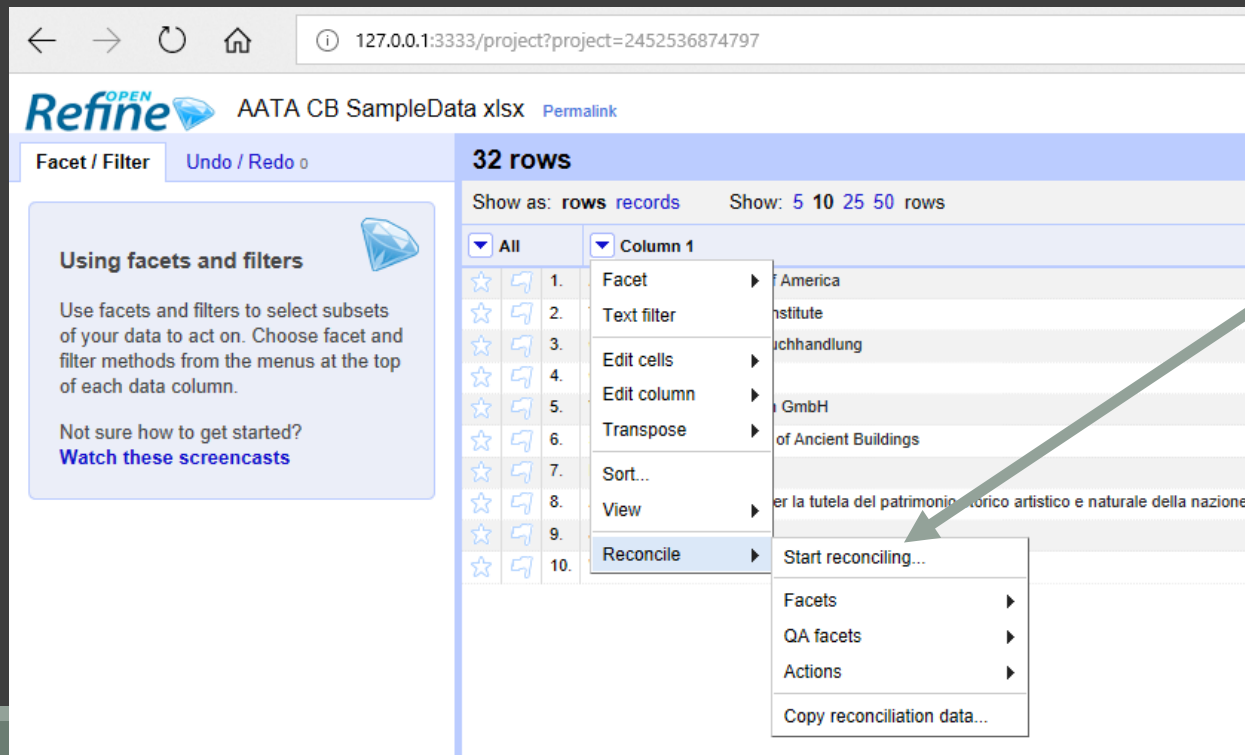
Show as: rows records Show: 5 10 25 50 rows

▼ All	▼ Column 1	▼ Reconcile1	▼ Column 2
★	1.	Sling-bullets	
★	2.	Finials	<a href="http://vocab.getty.edu/aat/300002280">http://vocab.getty.edu/aat/300002280</a> Art & Architecture Thesaurus®
★	3.	Scaraboids	<a href="http://vocab.getty.edu/aat/300265272">http://vocab.getty.edu/aat/300265272</a>
★	4.	Architraves	<a href="http://vocab.getty.edu/aat/300001780">http://vocab.getty.edu/aat/300001780</a> Art & Architecture Thesaurus®
★	5.	Xylophones	<a href="http://vocab.getty.edu/aat/300041976">http://vocab.getty.edu/aat/300041976</a> Art & Architecture Thesaurus®
★	6.	Ephemera	<a href="http://vocab.getty.edu/aat/300028881">http://vocab.getty.edu/aat/300028881</a> Art & Architecture Thesaurus®
★	7.	Akroteria	Beazley Archive Dictionary
★	8.	Chalices	<a href="http://vocab.getty.edu/aat/300194762">http://vocab.getty.edu/aat/300194762</a> GettyGuide glossary term
★	9.	Staters	<a href="http://vocab.getty.edu/aat/300191666">http://vocab.getty.edu/aat/300191666</a> Art & Architecture Thesaurus®
★	10.	Medallions	<a href="http://vocab.getty.edu/aat/300077357">http://vocab.getty.edu/aat/300077357</a> GettyGuide glossary term
★	11.	Sestertii	<a href="http://vocab.getty.edu/aat/300037270">http://vocab.getty.edu/aat/300037270</a> Art & Architecture Thesaurus®
★	12.	Hecte	
★	13.	Cistophori	<a href="http://vocab.getty.edu/aat/300191362">http://vocab.getty.edu/aat/300191362</a> Art & Architecture Thesaurus®
★	14.	Wreaths	<a href="http://vocab.getty.edu/aat/300220784">http://vocab.getty.edu/aat/300220784</a> Art & Architecture Thesaurus®
★	15.	Gum Bichromate	<a href="http://vocab.getty.edu/aat/300053501">http://vocab.getty.edu/aat/300053501</a> Looking at Photographs: A Guide to Techni
★	16.	Landscapes	<a href="http://vocab.getty.edu/aat/300008626">http://vocab.getty.edu/aat/300008626</a> Art & Architecture Thesaurus®
★	17.	Situlai	<a href="http://vocab.getty.edu/aat/300198870">http://vocab.getty.edu/aat/300198870</a> GettyGuide glossary term
★	18.	Barometers	<a href="http://vocab.getty.edu/aat/300195808">http://vocab.getty.edu/aat/300195808</a> Art & Architecture Thesaurus®
★	19.	Photographs	<a href="http://vocab.getty.edu/aat/300046300">http://vocab.getty.edu/aat/300046300</a> Art & Architecture Thesaurus®
★	20.	Epistolaries	<a href="http://vocab.getty.edu/aat/300026465">http://vocab.getty.edu/aat/300026465</a> Art & Architecture Thesaurus®
★	21.	Kalpides	<a href="http://vocab.getty.edu/aat/300198846">http://vocab.getty.edu/aat/300198846</a> GettyGuide glossary term
★	22.	Law Books	
★	23.	Breastplates	<a href="http://vocab.getty.edu/aat/300036753">http://vocab.getty.edu/aat/300036753</a> Art & Architecture Thesaurus®
★	24.	Cups and Saucers	GettyGuide
★	25.	Distemper on linen	GettyGuide glossary term

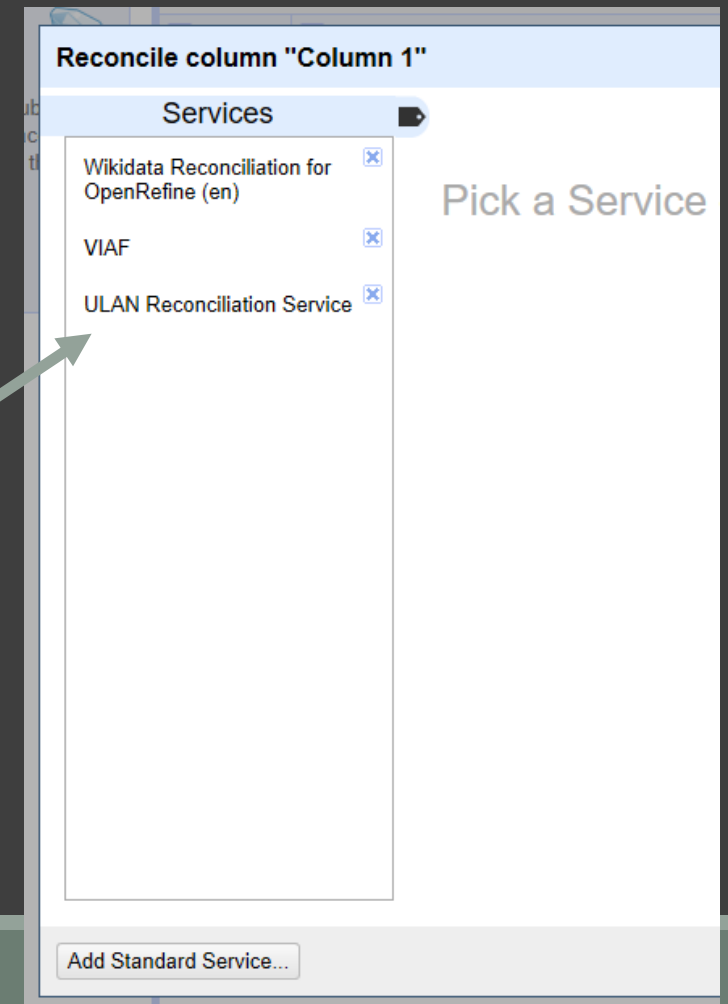
# In Development: Reconciliation Service for OpenRefine

Internal testing on Getty datasets

Added properties for searching people and places



The screenshot shows the OpenRefine web interface. The browser address bar displays '127.0.0.1:3333/project?project=2452536874797'. The page title is 'AATA CB SampleData.xlsx'. The interface includes a 'Facet / Filter' section with 'Undo / Redo' buttons. A data table with 32 rows is visible, with a context menu open over the first row. The menu options include 'Facet', 'Text filter', 'Edit cells', 'Edit column', 'Transpose', 'Sort...', 'View', and 'Reconcile'. The 'Reconcile' option is highlighted, and its sub-menu is open, showing 'Start reconciling...', 'Facets', 'QA facets', 'Actions', and 'Copy reconciliation data...'. A green arrow points from the 'Start reconciling...' option in the sub-menu to the 'Reconcile column "Column 1"' dialog box on the right.



The screenshot shows the 'Reconcile column "Column 1"' dialog box. The dialog has a title bar and a 'Services' section. The 'Services' section contains a list of services: 'Wikidata Reconciliation for OpenRefine (en)', 'VIAF', and 'ULAN Reconciliation Service'. Each service has a small 'x' icon to its right. To the right of the list, the text 'Pick a Service' is displayed. At the bottom of the dialog, there is a button labeled 'Add Standard Service...'. A green arrow points from the 'Start reconciling...' option in the context menu of the previous screenshot to the 'Reconcile column "Column 1"' dialog box.

**Refine**<sup>OPEN</sup> AATA CB SampleData.xlsx [Permalink](#)

Facet / Filter Undo / Redo 7

Refresh Reset All Remove All

32 rows

Show as: rows records Show: 5 10 25 50 rows

Column 1: judgment [change](#)

2 choices Sort by: name count

matched 12  
none 20

Facet by choice counts

Column 1: best candidate's score [change](#) [reset](#)

0.31 — 0.94

Numeric 21  Non-numeric 0  Blank 0  Error 11

All		Column 1
☆	🗨	1. <a href="#">Archaeological Institute of America. American School of Classical Studies at Athens.</a> <a href="#">Choose new match</a>
☆	🗨	2. <a href="#">Getty Conservation Institute</a> <a href="#">Choose new match</a>
☆	🗨	3. <a href="#">C.H. Beck'sche Verlagsbuchhandlung</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>
☆	🗨	4. <a href="#">Carl Hanser Verlag</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>
☆	🗨	5. <a href="#">Verlag Philipp von Zabern GmbH</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>
☆	🗨	6. <a href="#">Society for the Protection of Ancient Buildings</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Society for the Protection of Ancient Buildings</a> (0.813) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Switzerland. Directorate of Federal Buildings for Buildings Abroad</a> (0.479) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Royal Society for the Protection of Birds</a> (0.477) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>
☆	🗨	7. <a href="#">Elsevier BV</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>
☆	🗨	8. <a href="#">Associazione nazionale per i centri storico-artistici</a> <a href="#">Choose new match</a>
☆	🗨	9. <a href="#">J. Paul Getty Trust</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">J. Paul Getty Trust. Getty Grant Program</a> (0.58) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">J. Paul Getty Museum at the Getty Villa</a> (0.44) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">J. Paul Getty Museum at the Getty Center</a> (0.44) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">J. Paul Getty Trust</a> (0.398) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>
☆	🗨	10. <a href="#">Wiley-Blackwell Publishing Ltd.</a> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <a href="#">Create new topic</a>

# New LOD Profile Features

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New JSON-LD profile uses the CIDOC-CRM ontology to provide a compact view of Vocabulary data suitable for semantic manipulation and framing

Ties directly into Linked.art data model

Eliminates idea of “preferences” throughout the data model; designation of preferred values/labels to be served through a mechanism TBD

# New LOD Profile Preview (AAT)

## Concept Descriptions

Notes that describe a concept and clarify its meaning within the context of the AAT.

Chinese (traditional)

Dutch

English

German

Spanish

Vessels from Ancient Greece, eastern Europe, or the Middle East that were typically made as a closed form with two openings, one at the top for filling and one at the base so that liquid could stream out. They are often in the shape of a horn or an animal's head, and were typically used as a drinking cup or for pouring wine into another vessel. Drinking was done by holding the rhyton above the drinker's head and catching the stream of liquid in the mouth.

### Sources:

J. Paul Getty Museum. [online] Los Angeles: J. Paul Getty Trust, 2000-.  
<http://www.getty.edu/art/collections/> (1 January 2003).

Encyclopædia Britannica. Britannica Online. Chicago: Encyclopædia Britannica, Inc., 2002-.  
<http://www.eb.com/> (1 July 2002).

### Contributors:

Each object within the `subject_of` array is a single term used to describe this concept. They follow the [Linked Art Linguistic Object](#) pattern.

Expand

They each may have one or more `referred_to_by` blocks, each of which is another Linguistic Object. These are `classified_as` various types, and more information about the type URLs can be found in the `uses_terms` section below.

```
"subject_of": [  
  {  
    "id": "http://vocab.getty.edu/aat/scopeNote/34904",  
    "type": "LinguisticObject",  
    "value": "Vessels from Ancient Greece, eastern Euro",  
    "language": "en",  
    "referred_to_by": [  
      {  
        "id": "http://vocab.getty.edu/aat/300198841#des",  
        "type": "Name",  
        "value": "Getty Vocabulary Program",  
        "identifies": "http://vocab.getty.edu/aat/contr",  
        "classified_as": [  
          "http://vocab.getty.edu/aat/300403974"  
        ]  
      }  
    ],  
  },  
]
```

# New LOD Profile Preview (AAT)

— **rhyta** (English)

Type of Term: **Descriptor** | Part of  
Speech: **Plural Noun**

## Sources:

CDMARC Subjects: Library of Congress Subject Headings. Washington, DC: Library of Congress, Cataloging Distribution Service, 1988-. Quarterly, with each issue cumulative.

Encyclopædia Britannica. Britannica Online. Chicago: Encyclopædia Britannica, Inc., 2002-. <http://www.eb.com/> (1 July 2002).

Boardman, John. El Arte Griego. Barcelona: Destino, 1996.

## Contributors:

Getty Conservation Institute, The Getty Center (Los Angeles, California)

Getty Vocabulary Program

Centro de Documentación de Bienes Patrimoniales (Dirección de Bibliotecas, Archivos y Museos; Santiago, Chile)

```
"identifies": "http://vocab.getty.edu/aat/cont",
"classified_as": [
  "http://vocab.getty.edu/aat/300403974"
]
},
{
  "id": "http://vocab.getty.edu/aat/300198841#ter",
  "type": "Name",
  "value": "TAA: Tesauro de Arte & Arquitectura.",
  "identifies": "http://vocab.getty.edu/aat/sourc",
  "classified_as": [
    "http://vocab.getty.edu/aat/300311936"
  ]
}
],
},
{
  "id": "http://vocab.getty.edu/aat/term/1000589084-3",
  "type": "Name",
  "value": "角杯",
  "language": "zh-hant",
  "classified_as": [
    "http://vocab.getty.edu/term/type/UsedForTerm"
  ],
  "referred_to_by": [
    {
```

# Contributing to the Getty Vocabularies

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Individual records can be submitted through online contribution form

- <http://vocabcontrib.getty.edu/login.aspx>
- Requires registering with the Getty Vocabulary Program as a contributor
- Only works with Internet Explorer in compatibility mode (Yikes!)

XML Format for bulk import

- [http://www.getty.edu/research/tools/vocabularies/getty\\_vocab\\_xml\\_schemas.zip](http://www.getty.edu/research/tools/vocabularies/getty_vocab_xml_schemas.zip)
- Data not submitted in XML import format can take an undermined amount of time to process
- Import format is custom Getty Vocabularies schema definition

# Required Fields (webform)

 **Art & Architecture Thesaurus® Online**  
Candidate contribution form

[Save Draft](#) [Open Draft](#) [Clear Form](#) [Submit Candidate](#) [Log Out](#)

All fields marked with an (\*) are required. Click on field name to see rules. NOTE: You can not edit the record after candidate is submitted.

Draft in use: **None**

**CONTRIBUTION INFORMATION**

[Contributing Institution](#)  \*

[Contributor ID](#)  \*

[Editor Name](#)  \*

[Editor Email](#)  \*

[New or Comment](#)

[Record Type](#)  (Note: Please change the Record Type if you are submitting a guide term)

[Preferred Parent](#)   \*

[Additional Parent](#)

**TERMS**

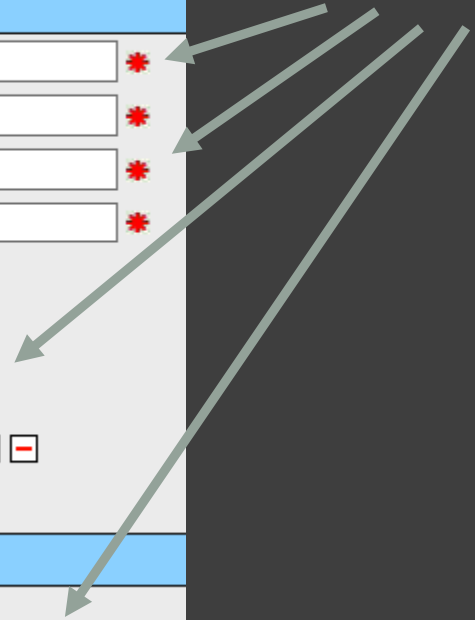
natural order form of the term

[1. Preferred Term](#)  \* [Sort On](#)

[Click to add Source, Language, Qualifier, Date, LC Authority flag, other flags](#) \*

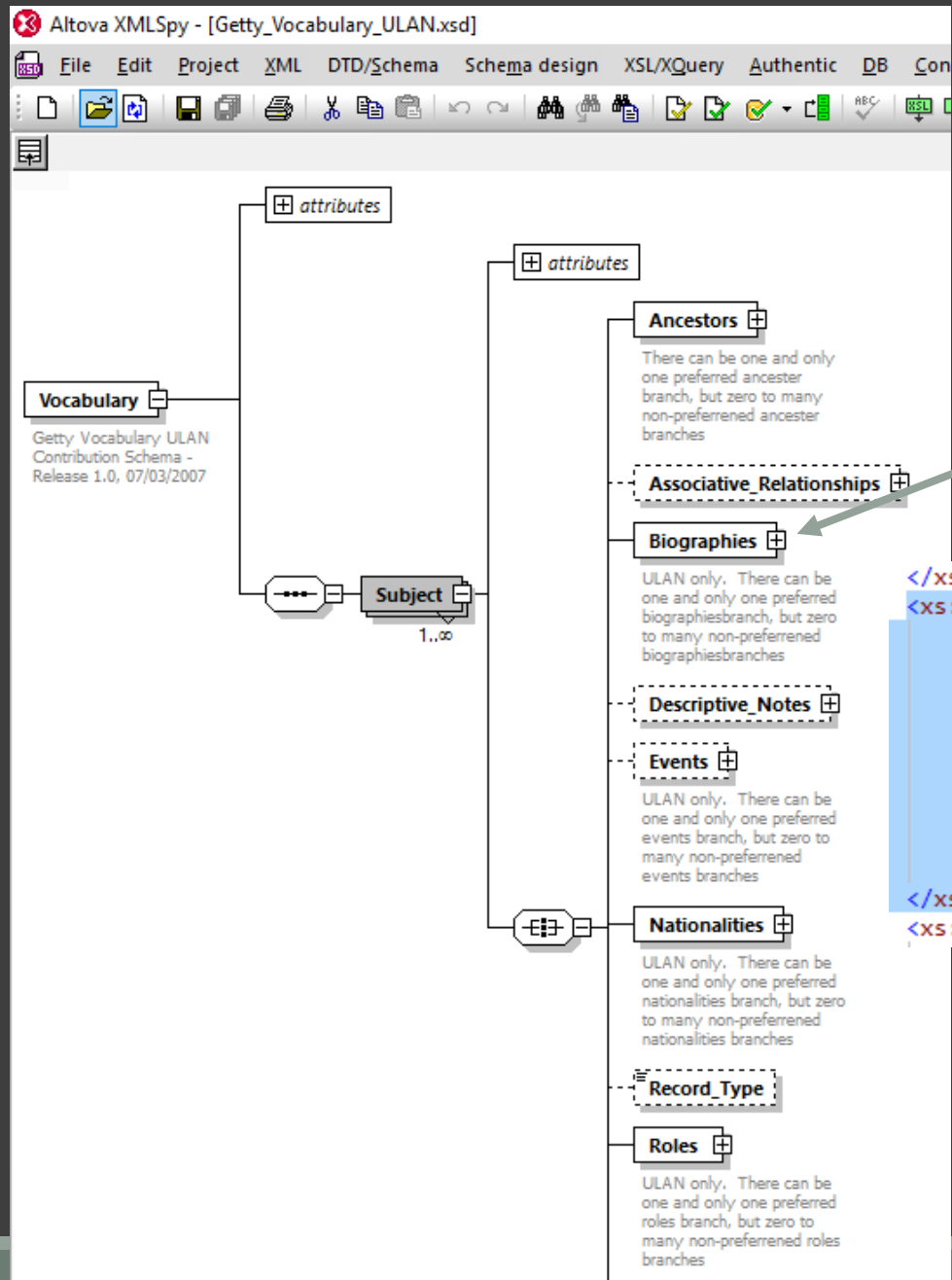
inverted term, synonyms, alternate forms of speech

Red stars indicate required fields





# Required Fields (Import XML)



Required fields indicated by XML schema

```
</xs:element>  
<xs:element name="Biographies">  
  <xs:annotation>  
    <xs:documentation>ULAN only. There can be one and only one preferred biographiesbranch</xs:documentation>  
  </xs:annotation>  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element name="Preferred_Biography" type="BiographyType"/>  
      <xs:element name="Non-Preferred_Biography" type="BiographyType" minOccurs="0" maxOccurs="1"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>  
<xs:element name="Descriptive_Notes" minOccurs="0" maxOccurs="1"/>
```

# Conclusions on Contributing to the Getty Vocabularies

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Systems are old and/or cumbersome

Data transformations are time-consuming processes that can lead to errors no matter how careful the mapping

Required data may not be available

New processes and tools are needed to make contributing to the Getty Vocabularies quicker and easier without sacrificing accuracy or bypassing editorial authority

# Current/Future Development

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## Rebuild/re-architect of internal systems

- Maximize open source platforms (Arches)
- Improve flow of system inputs and outputs – accept contributions and publish seamlessly
- Internal subscription and messaging system for tracking changes and making updates

## Updated profile and visualization for LOD entities

- New default CRM-based entity profiles for JSON and JSON-LD serializations
- All other serializations (RDF/XML, Turtle, N-triples) stay SKOS-based

## Reconciliation service for OpenRefine