

LAM-SKOS-AP 0.8

Goal

This document describes the application profile needed to describe the assets in the LAM project.

LAM classification table maintains a set of concepts that represent groups of documents uniquely distinguished by the column keywords which in fact means title fragments.

Latter on this asset will have to manage dependencies between the associated classes (cdm class, resource type, document type etc.) and mandatory present/absent properties. This dependency management shall be performed in a proto-application-profile fashion.

TODO:

- ☒ create the initial asset in VB3 using the the first 5 columns 20 Mar 2019
- ☒ meet and explain 27 Mar 2019
- ☒ develop the SRC-AP-LAM 1.0 to be able to express the first part of the excel table
- ☐ develop the SRC-AP-LAM 2.0 to be able to express the second/last part of the excel table
- ☐ update the project in VB accordingly.

Partial Input



Application Profile

URI pattern

<http://publications.europa.eu/resources/authority/lam/>*

skos:Concept class

This class is subclass of skos:Concept and represents the backbone for maintaining Legal Analysis Methodology. This is a meta-class and roughly corresponds to rdfs:Class or owl:Class. The instances of this class represent classes of legal resources in Cellar.

| Domain | Property | Range | Excel column | Min cardinality | Max cardinality | Value Restrictions | Comment |
|--------------|-----------------------|-------------|-------------------|-----------------|-----------------|--------------------|--|
| skos:Concept | skos:exactMatch | URI | CDM_class | 1 | * | CDM Work | sub-property of skos:related; perhaps <i>skos:closeMatch</i> is more appropriate here. |
| skos:Concept | skos:editorialNote@en | LangLiteral | CDM_class_comment | 0 | * | | |

| | | | | | | | |
|------------------|--------------------------------|------------------------|--|---|---|-------------------------------|---|
| skos: Concept | lam:dtc | Literal | DTS | 1 | 1 | | sub-property of skos:notation; part of cdm:resource_legal_id_celex |
| skos: Concept | lam:dtl | Literal | DTT | 1 | 1 | | sub-property of skos:notation; part of cdm:resource_legal_id_celex |
| skos: Concept | cdm: work_has_resource-type | URI | Resource type | 1 | 1 | ResourceType AT | cdm:resource-type is a class not a property. candidate properties are <i>cdm:resource_legal_has_type_act_concept_type_act</i> <i>cdm:work_has_resource-type</i> |
| skos: Concept | lam:ojType | Literal | OJ type | 1 | 1 | free text, coming from PlanJO | sub-property of skos:notation; this eventually should evolve into a controlled list or removed because it seems quite similar to resource type. candidate property: <i>cdm:official_journal</i> |
| skos: Concept | cdm: keywords@en | LangLiteral | Keywords | 1 | 1 | | should evolve into a set of values split by the new line; originally created for search purposes; to uniquely identify a concept/document type all these keywords must appear in the document. candidate property: <i>cdm:keyword</i> (not <i>cdm:keywords</i> as currently set) |
| skos: Concept | skos: example@en | LangLiteral | Example EN | 0 | * | | |
| skos: Concept | skos: example@fr | LangLiteral | Example FR | 0 | * | | |
| skos: Concept | skos: editorialNote@en | LangLiteral | Additional comment | 0 | * | | |
| skos: Concept | cdm: created_by | URI | Author | 1 | * | Corporate body, Country | |
| skos: Concept | skos: example | Literal | Examples from EUR-Lex | 0 | * | | |
| skos: Concept | sh:property | lam:PropertyConstraint | All columns from <i>M</i> to the <i>last one</i> . | 1 | * | | Starting from column M (EuroVoc) until the last one, each column or pair of columns (for annotated properties) in Excel should become a property constraint instance in the LAM class. |

lam:PropertyConstraint class

This class is subclass of sh:Shape and represents the main mechanism for expressing class restrictions, i.e. constraints that apply to all instances of this class. The aim is to come as close as possible to SHACL language.

This class should be instantiated as constraint descriptions for various (cdm) properties of LAM classes.

The constraint definition follows the description of the SHACL core components (<https://www.w3.org/TR/shacl/#core-components>). The mechanisms relevant for LAM project are the cardinality (min,max) constraints and the controlled list of values.

Requirement: each cdm property (currently columns in the Excel file) needs to be restricted in a certain way, either by value, and/or by an additional annotation property (in case of various cdm:dates).

| Domain | Property | Range | Min cardinality | Max cardinality | Value Restrictions | Comment |
|--------|----------|-------|-----------------|-----------------|--------------------|---------|
|--------|----------|-------|-----------------|-----------------|--------------------|---------|

| | | | | | | |
|-------------------------|-----------------------------|--------------------|---|---|--|---|
| lam: PropertyConstraint | sh:path | URI (rdf:Property) | 1 | 1 | cdm property | |
| lam: PropertyConstraint | sh:minCount | xsd:integer | 0 | 1 | | The minimum cardinality. Node shapes cannot have any value for sh:minCount. A property shape has at most one value for sh:minCount. The values of sh:minCount in a property shape are literals with datatype xsd:integer. |
| lam: PropertyConstraint | sh:maxCount | xsd:integer | 0 | 1 | | The maximum cardinality. Node shapes cannot have any value for sh:maxCount. A property shape has at most one value for sh:maxCount. The values of sh:maxCount in a property shape are literals with datatype xsd:integer. |
| lam: PropertyConstraint | sh:class | URI | 0 | 1 | URI of a controlled list concept scheme, under the assumption that the class equivalence is established to the concept scheme. | The type of all value nodes. The values of sh:class in a shape are IRIs. |
| lam: PropertyConstraint | sh:datatype | URI | 0 | 1 | URI of any XSD or other data types. | The datatype of all value nodes (e.g., xsd:integer). The values of sh:datatype in a shape are IRIs. A shape has at most one value for sh:datatype. |
| lam: PropertyConstraint | sh:hasValue | URI /Literal | 0 | 1 | | A specific required value. |
| lam: PropertyConstraint | sh:in | SHACL list | 0 | 1 | A list of accepted values | A SHACL list that has the allowed values as members. Each value of sh:in in a shape is a SHACL list. A shape has at most one value for sh:in. |
| lam: PropertyConstraint | sh:name | Literal | 0 | 1 | | how to refer to it in documentation, i.e. a human friendly name |
| lam: PropertyConstraint | sh:description | Literal | 0 | 1 | | describe the meaning of this constraint in the documentation |
| lam: PropertyConstraint | lam:annotatedWithProperty | URI (rdf:Property) | 0 | 1 | cdm annotation property | cdm property the owl:Annotation is created for. The first assumption is that there is maximum one annotation property needed to annotate the cdm:property. For example the cdm date properties, such as cdm:resource_legal_date_deadline, are annotated with annot:comment_on_date only. The second assumption is that the only relevant control on the annotation property is the value range. |
| lam: PropertyConstraint | lam:annotationPropertyRange | URI | 0 | 1 | a controlled list such as FD tables | this constraint is tightly coupled to <i>lam:annotatedWithProperty</i> |

Note: the annotation constraint specification using *lam:annotatedWithProperty* and *lam:annotationPropertyRange* is a shortcut to creating two types of constraint specifications, which would complicate the LAM model in VB3. The decision to merge constraints is an attempt to optimise and ease the work of the content managers.

Involved controlled vocabularies

- fd_013
- fd_014

- fd_040
- fd_100
- fd_130
- fd_301
- fd_330
- fd_335
- fd_340
- fd_345
- fd_350
- fd_361
- fd_365
- fd_370
- fd_375
- fd_395
- fd_396
- fd_400
- fd_578
- <http://publications.europa.eu/resource/dataset/corporate-body>
- <http://publications.europa.eu/resource/dataset/corporate-body>
- <http://publications.europa.eu/resource/dataset/country>
- <http://publications.europa.eu/resource/dataset/dir-eu-legal-act>
- <http://publications.europa.eu/resource/dataset/eurovoc>
- <http://publications.europa.eu/resource/dataset/language>
- <http://publications.europa.eu/resource/dataset/place>
- <http://publications.europa.eu/resource/dataset/procjur>
- <http://publications.europa.eu/resource/dataset/procresult>
- <http://publications.europa.eu/resource/dataset/resource-type>
- <http://publications.europa.eu/resource/dataset/role-qualifier>
- <http://publications.europa.eu/resource/dataset/subject-matter>
- <http://publications.europa.eu/resource/dataset/treaty>

OJ type