



Drawio2triples

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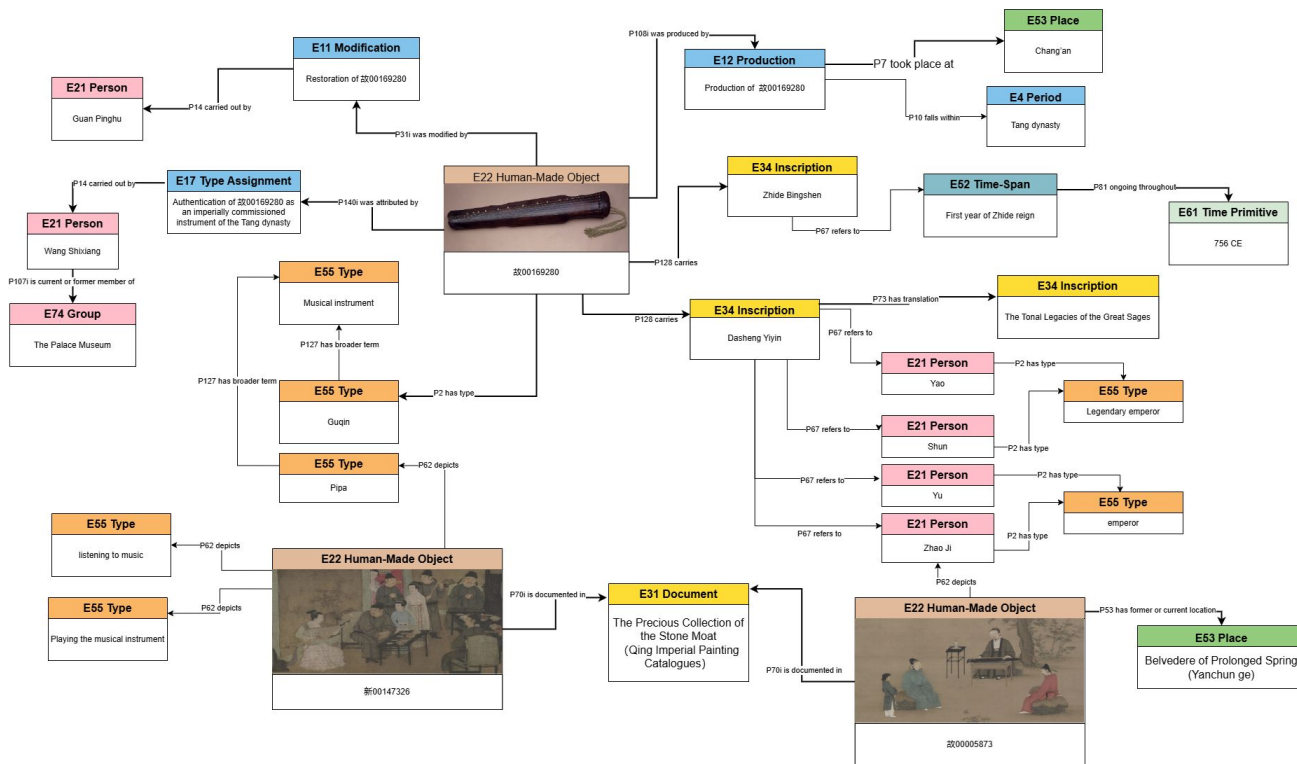
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Drawio2Triples - About

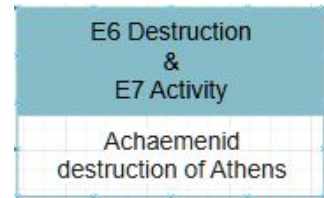
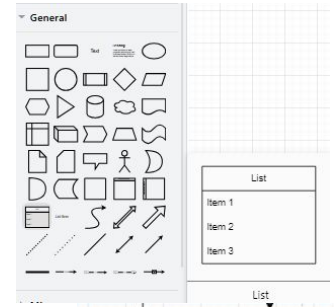
- A service processing diagrams created with app.diagrams.net a.k.a. Drawio
- Receives as input a raw export format of drawio
- Produces triples(rdf/ttl) using CRMbase and CRMpc module (v.7.1.2)
 - Syntactic & Semantic validation
- The service is available at: https://isl.ics.forth.gr/cidoc_services/

Guqin example - The Palace Museum



Instances specification

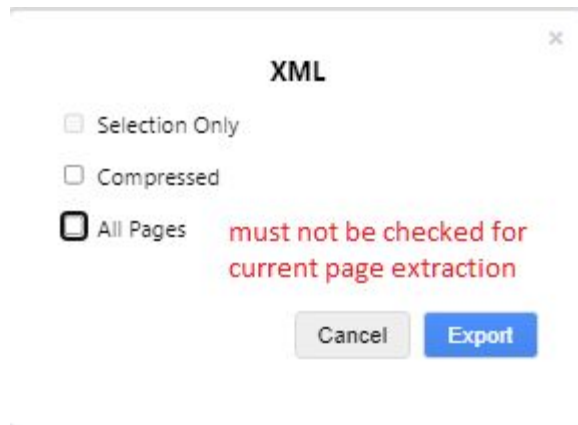
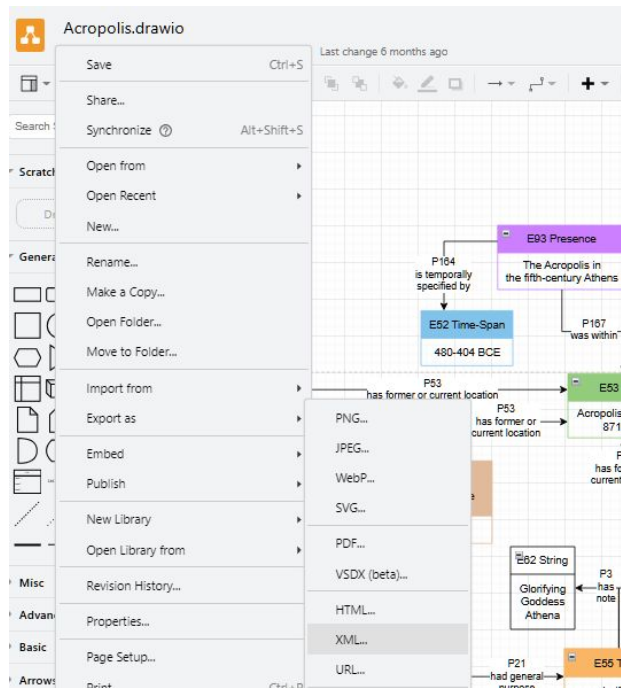
- **Instances** are defined using the **List shape** that includes a header and a set of list items
 - The header of the list shape is used to define the instance Class(es) [Multiple inheritance specified with &]
 - The optional list items specify further instance information
 - text box defines an rdfs:label
 - a dragged & dropped image defines a
 - P138i has representation: E36 Visual Item



Properties and .1 properties specification

- **Properties** are defined using any simple arrow connector that:
 - Specifies a source instance / list item
 - Specifies a target instance / list item
 - Specifies the property type with the text box that is integrated to the shape by double clicking on the arrow
- **.1 Properties** are defined using any simple arrow connector that:
 - Specifies a target instance / list item
 - Specifies the property type with the text box that is integrated to the shape by double clicking on the arrow
 - Is Grouped with the domain property arrow

Drawio2Triples input preparation

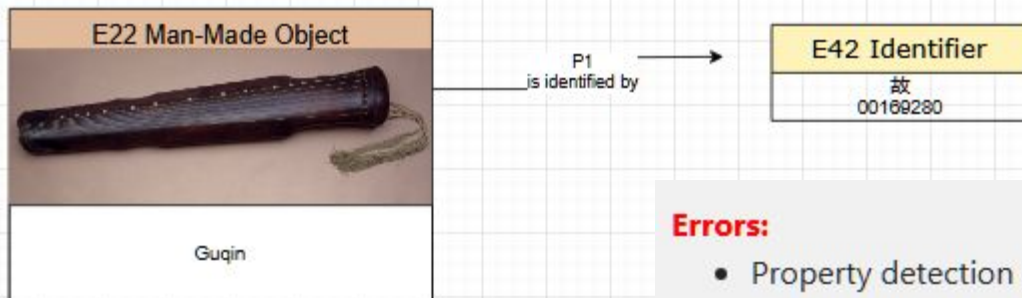


Drawio2Triples usage

The Drawio XML file is uploaded. Service produces the following result messages:

- **Statistics:** numbers of detected instances, properties and .1 properties
- **Warnings:** reports attention cases which have not blocked the transformation to triples. May point to label renames or information that has not been transformed and needs to be added manually e.g. literals
 - **Validation issues:** reports cases where there have been detected semantic errors such as wrong domain / range specification. These messages do not block triples generation as they may just require manual correction
- **Errors:** reports cases which blocked the transformation to triples. May refer to
 - Instance Class identification failure
 - Property type identification failure or source/target relationship detection errors

Error reporting examples



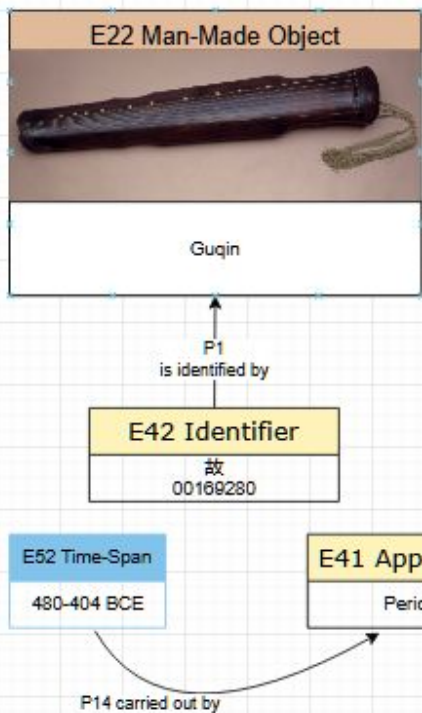
Errors:

- Property detection errors:
 - Failed to identify: 'TARGET' for property with text 'P1 is identified by' and id 'wDpC7f_SMBrsfjAgw98p-3'

Warnings:

- Rename the following class labels:
 - Rename 'E22 Man-Made Object' to: 'E22 Human-Made Object'

Reported messages examples



Statistics:

- The diagram from file: 'Examples-Σελίδα-2.drawio (3).xml' specified: 4 instances connected with: 2 properties and: 0 PC (.1) properties.
Note: the number of instances and classes in the current file may differ (Check WARNING messages).

Warnings:

- Rename the following class labels:
 - Rename 'E22 Man-Made Object' to: 'E22 Human-Made Object'

Validation issues:

- Detected the following 1 invalid DOMAIN property cases:
 - http://www.cidoc-crm.org/cidoc-crm/P14_carried_out_by originating from instance of: http://www.cidoc-crm.org/cidoc-crm/E52_Time-Span (480-404 BCE).
- Detected the following 2 invalid RANGE property cases:
 - http://www.cidoc-crm.org/cidoc-crm/P1_is_identified_by targeting instance of: http://www.cidoc-crm.org/cidoc-crm/E22_Human-Made_Object (Guqin). Consider use of inverse property: http://www.cidoc-crm.org/cidoc-crm/P1i_identifies.
 - http://www.cidoc-crm.org/cidoc-crm/P14_carried_out_by targeting instance of: http://www.cidoc-crm.org/cidoc-crm/E41_Appellation (Pericles).

Feedback / Future extensions

- Adaptations to work with CHIN library
- Configuration regarding
 - Ontologies to load
 - Output namespace
 - Additional parsing fields
 - E.g. uri field in order specify the exact uri that should be used instead of the automatically assigned uri based on the unstable drawio id
 - Enables multi-page support of complex examples
- Improve handling of rdfs:Literals
- Report messages optimization
- Multilingual support

Questions / Feedback

