

Visual queries over the Europeana data endpoint

Examples adapted and inspired from <https://pro.europeana.eu/page/sparql>

Example 0 (initial explanation)

<pre> PREFIX dc: <http://purl.org/dc/elements/1.1/> PREFIX edm: <http://www.europeana.eu/schemas/edm/> PREFIX ore: <http://www.openarchives.org/ore/terms/> SELECT ?title ?creator ?mediaURL ?date WHERE { ?CHO edm:type "SOUND" ; ore:proxyIn ?proxy; dc:title ?title ; dc:creator ?creator; dc:date ?date . ?proxy edm:isShownBy ?mediaURL . FILTER (?date > "1780" && ?date < "1930") } ORDER BY asc (?date) LIMIT 100 </pre>	
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What are the classes ?X and ?Y corresponding to the query nodes?

	<pre> PREFIX dc: <http://purl.org/dc/elements/1.1/> PREFIX : <http://www.europeana.eu/schemas/edm/> PREFIX ore: <http://www.openarchives.org/ore/terms/> SELECT DISTINCT ?X ?Y WHERE{ ?CHO a ?X. ?proxy a ?Y. ?proxy :isShownBy ?mediaURL. ?CHO dc:title ?title. ?CHO dc:creator ?creator. ?CHO dc:date ?date. ?CHO :type ?type. FILTER(STR(?type) = "SOUND") FILTER(?date > "1780" && ?date < "1930") ?CHO ore:proxyIn ?proxy. } </pre>
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#	X	Y
1	http://www.openarchives.org/ore/terms/Proxy	http://www.openarchives.org/ore/terms/Aggregation

So, enrich the query nodes with the respective class information (the actual classes in this case happen to differ from the ones suggested by the chosen instance variable names).

<p style="text-align: center;">ore:Proxy</p> <p style="text-align: center;">CHO</p> <p>type = "SOUND"</p> <p>date > "1780" && date < "1930"</p> <p>{+} title<-dc:title</p> <p>{+} creator<-dc:creator</p> <p>{+} date<-dc:date</p> <p>order by date</p> <p>show first 100 row(s)</p>	<p>PREFIX ore: <http://www.openarchives.org/ore/terms/></p> <p>PREFIX dc: <http://purl.org/dc/elements/1.1/></p> <p>PREFIX : <http://www.europeana.eu/schemas/edm/></p> <p>SELECT ?title ?creator ?date ?mediaURL WHERE{</p> <p> ?CHO a ore:Proxy.</p> <p> ?proxy a ore:Aggregation.</p> <p> ?proxy :isShownBy ?mediaURL.</p> <p> ?CHO dc:title ?title.</p> <p> ?CHO dc:creator ?creator.</p> <p> ?CHO dc:date ?date.</p> <p> ?CHO :type ?type.</p> <p> FILTER(STR(?type) = "SOUND")</p> <p> FILTER(?date > "1780" && ?date < "1930")</p> <p> ?CHO ore:proxyIn ?proxy.</p> <p>}</p> <p>ORDER BY ?date</p> <p>LIMIT 100</p>
<p>ore:proxyIn</p>	
<p style="text-align: center;">ore:Aggregation</p> <p style="text-align: center;">proxy</p> <p>{+} mediaURL<-isShownBy</p>	

Example 1 (with actual class names and extra information)

<p>List of (distinct) data providers which contributed content to Europeana</p>	<p style="text-align: center;">ore:Aggregation</p> <p style="text-align: center;">Aggregation</p> <p>{+} dataProvider</p> <p>select distinct</p>	<p>PREFIX ore: <http://www.openarchives.org/ore/terms/></p> <p>PREFIX : <http://www.europeana.eu/schemas/edm/></p> <p>SELECT DISTINCT ?dataProvider WHERE{</p> <p> ?Aggregation a ore:Aggregation.</p> <p> ?Aggregation :dataProvider ?dataProvider.</p> <p>}</p>
<p>Add the instance count for each provider ..</p>	<p>C<-count(.)</p> <p style="text-align: center;">ore:Aggregation</p> <p style="text-align: center;">Aggregation</p> <p>{+} dataProvider</p> <p>order by C DESC</p>	<p>PREFIX ore: <http://www.openarchives.org/ore/terms/></p> <p>PREFIX : <http://www.europeana.eu/schemas/edm/></p> <p>SELECT ?dataProvider (COUNT(?Aggregation) AS ?C)</p> <p>WHERE{</p> <p> ?Aggregation a ore:Aggregation.</p> <p> ?Aggregation :dataProvider ?dataProvider.</p> <p>}</p> <p>GROUP BY ?dataProvider</p> <p>ORDER BY DESC(?C)</p>

Example 2 (with actual class names and extra information)

<p>List of (distinct) datasets from Italy</p>	<p style="text-align: center;">EuropeanaAggregation</p> <p>country="italy"</p> <p>{+} collectionName</p> <p>select distinct</p>	<p>PREFIX : <http://www.europeana.eu/schemas/edm/></p> <p>SELECT DISTINCT ?collectionName WHERE{</p> <p> ?EuropeanaAggregation a :EuropeanaAggregation.</p> <p> ?EuropeanaAggregation :collectionName ?collectionName.</p> <p> ?EuropeanaAggregation :country ?country.</p> <p> FILTER(STR(?country) = "italy")</p> <p>}</p>
<p>Add the item count for each dataset ..</p>	<p>C<-count(.)</p> <p style="text-align: center;">EuropeanaAggregation</p> <p>country="italy"</p> <p>{+} collectionName</p> <p>order by C DESC</p>	<p>PREFIX : <http://www.europeana.eu/schemas/edm/></p> <p>SELECT ?collectionName</p> <p>(COUNT(?EuropeanaAggregation) AS ?C) WHERE{</p> <p> ?EuropeanaAggregation a :EuropeanaAggregation.</p> <p> ?EuropeanaAggregation :collectionName ?collectionName.</p> <p> ?EuropeanaAggregation :country ?country.</p> <p> FILTER(STR(?country) = "italy") }</p> <p>GROUP BY ?collectionName</p> <p>ORDER BY DESC(?C)</p>

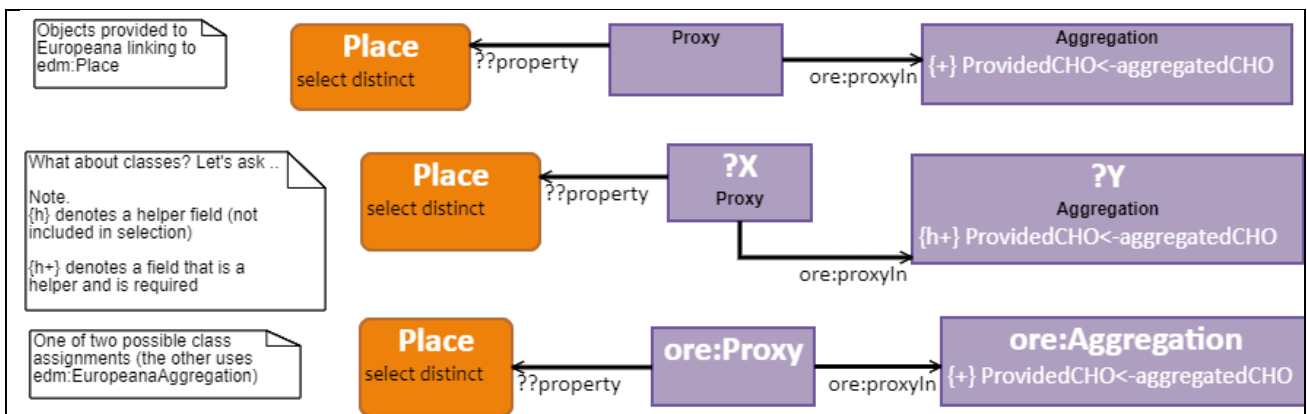
Example 3

<p>Objects provided to Europeana from the 18th and from France</p>	<p>Aggregation country = "france" select distinct order by year show first 100 row(s)</p>	<pre>PREFIX : <http://www.europeana.eu/schemas/edm/> PREFIX ore: <http://www.openarchives.org/ore/terms/> SELECT DISTINCT ?ProvidedCHO ?year WHERE{ ?Proxy :year ?year. ?Aggregation :country ?country. FILTER(STR(?country) = "france") FILTER(?year > "1700" && ?year < "1800") ?Aggregation :aggregatedCHO ?ProvidedCHO. ?Proxy ore:proxyFor ?ProvidedCHO. } ORDER BY ?year LIMIT 100</pre>
<p>Proxy year > "1700" && year < "1800" {+} year</p>	<p>aggregatedCHO ProvidedCHO (select this)</p>	
<p>Same query, with class information, instead of variable names</p>	<p>ore:Aggregation country = "france" select distinct order by year show first 100 row(s)</p>	<pre>PREFIX ore: <http://www.openarchives.org/ore/terms/> PREFIX : <http://www.europeana.eu/schemas/edm/> SELECT DISTINCT ?ProvidedCHO ?year WHERE{ ?Aggregation a ore:Aggregation. ?ProvidedCHO a :ProvidedCHO. ?Proxy a ore:Proxy. ?Proxy :year ?year. ?Aggregation :country ?country. FILTER(STR(?country) = "france") FILTER(?year > "1700" && ?year < "1800") ?Aggregation :aggregatedCHO ?ProvidedCHO. ?Proxy ore:proxyFor ?ProvidedCHO. } ORDER BY ?year LIMIT 100</pre>
<p>ore:Proxy year > "1700" && year < "1800" {+} year</p>	<p>aggregatedCHO ProvidedCHO (select this)</p>	

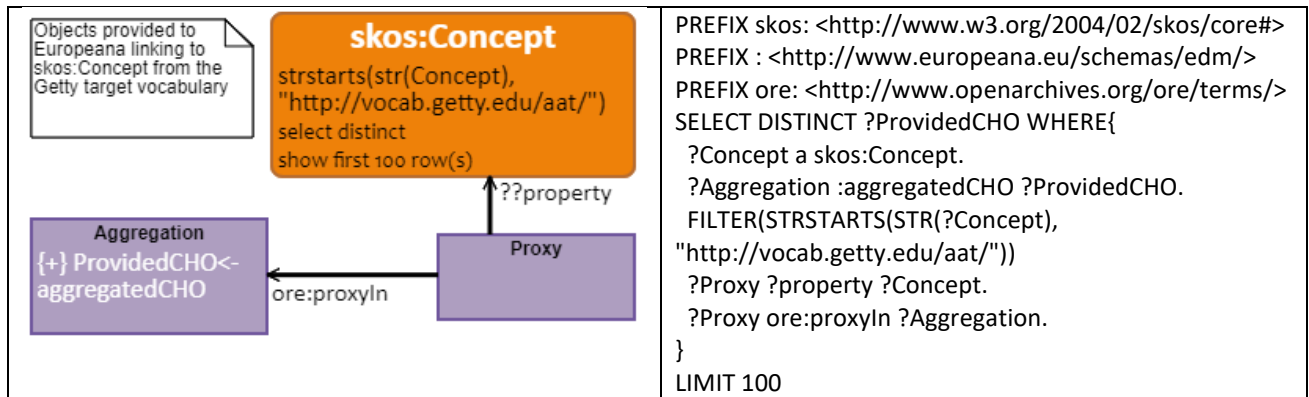
Example 4

<p>Listing of edm:Agent</p>	<p>Agent (select this) show first 100 row(s)</p>	<pre>PREFIX : <http://www.europeana.eu/schemas/edm/> SELECT ?Agent WHERE{ ?Agent a :Agent. } LIMIT 100</pre>
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Example 5 (see the translations into SPARQL within the live environment)



Example 7



Note. Examples 6 and 8 on <https://pro.europeana.eu/page/sparql> do not target the Europeana endpoint directly, so their visual handling would require some more further work to be done.

To experience the environment for query building, visit the live query environment with the examples considered here pre-built.