Part I

Sparql Endpoint : https://sparql.nextprot.org/

1 Graphs research

1.1 Queries for graphs and results

graph all_graphs_included.sparql : 1 results
graph graphs_with_a_triple_min.sparql : 7 results
graph graphs_with_rdf_type.sparql : 4 results
The graphs_with_a_triple_min.sparql returns more results (7)

1.2 List of graphs selected

graph 1 - http://www.openlinksw.com/schemas/virtrdf#
graph 2 - http://nextprot.org/rdf
graph 3 - http://www.w3.org/2002/07/owl#
graph 4 - http://localhost:8890/sparql
graph 5 - urn:activitystreams-owl:map
graph 6 - http://localhost:8890/DAV/
graph 7 - http://www.w3.org/ns/ldp#

2 Querying https://sparql.nextprot.org/

2.1 Results by query

Query class.sparql - distinct results : 176
Query property.sparql - distinct results : 356
Query label_class.sparql - distinct results : 0
Query label_property.sparql - distinct results : 23
Query subclass.sparql - distinct results : 140
Query subproperty.sparql - distinct results : 2
Query property_domain.sparql - distinct results : 24
Query property_range.sparql - distinct results : 23
Query indi_range_property.sparql - distinct results : 438
Query indi_domain_property.sparql - distinct results : 1204
Query entity_type.sparql - distinct results : 1048899
Total of unique results found 1051285 on https://sparql.nextprot.org/

2.2 Error Log

- Error on graph http://www.openlinksw.com/schemas/virtrdf# query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status code 500']

- Error on graph http://nextprot.org/rdf query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status code 500']

- Error on graph http://www.w3.org/2002/07/owl# query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status code 500']

- Error on graph http://localhost:8890/sparql query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status code 500']

- Error on graph urn:activitystreams-owl:map query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status code 500']

- Error on graph http://localhost:8890/DAV/ query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status code 500']

- Error on graph http://www.w3.org/ns/ldp# query/label_class.sparql : ['EndPointInternalError: The endpoint returned the HTTP status

code 500']

- Number of errors : 7

3 Process before indexation

3.1 JSON results conversion after distinct operation

All string results were converted into valid json results

4 Partition in separated queries

The volume of 1051285 results does not need query partition

5   Elastic Search Indexation

Index 'class' already exits and will be completed
Storing 176 results in index 'class' took 0.692 secs

Index 'property' already exits and will be completed
Storing 356 results in index 'property' took 0.316 secs

Index 'label_property' already exits and will be completed
Storing 23 results in index 'label_property' took 0.197 secs

Index 'subclass' has been successfully created
Storing 140 results in index 'subclass' took 0.866 secs

Index 'subproperty' has been successfully created
Storing 2 results in index 'subproperty' took 1.772 secs

Index 'property_domain' has been successfully created
Storing 24 results in index 'property_domain' took 3.509 secs

Index 'property_range' has been successfully created
Storing 23 results in index 'property_range' took 4.04 secs

Index 'indi_range_property' already exits and will be completed
Storing 438 results in index 'indi_range_property' took 0.1 secs

Index 'indi_domain_property' already exits and will be completed
Storing 1204 results in index 'indi_domain_property' took 0.406 secs

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Query subpartition 1 for entity_type
Total of results to store : 1048899
Partition size : 200000
Number of subpartitions : 6
Timesleep : 2 secs

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Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 57.351 secs

Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 79.063 secs

Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 54.268 secs

Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 46.137 secs

Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 79.446 secs

Index 'entity_type' already exits and will be completed
Storing 48899 results in index 'entity_type' took 5.735 secs

6   Getting results and indexing times

Getting results for https://sparql.nextprot.org/ took 3 min (228.71 secs)
Indexation for https://sparql.nextprot.org/ took 6 min (379.356 secs)