Part I

Sparql Endpoint : https://data.open.ac.uk/query

1 Graphs research

1.1 Queries for graphs and results

graph all_graphs_included.sparql : 41 results
graph graphs_with_a_triple_min.sparql : 41 results
graph graphs_with_rdf_type.sparql : 38 results
The graphs_with_a_triple_min.sparql returns more results (41)

1.2 List of graphs selected

graph 1 - http://data.open.ac.uk/context/about
graph 2 - http://data.open.ac.uk/context/ahrc
graph 3 - http://data.open.ac.uk/context/audioboo
graph 4 - http://data.open.ac.uk/context/bbc
graph 5 - http://data.open.ac.uk/context/buildings
graph 6 - http://data.open.ac.uk/context/course/archive
graph 7 - http://data.open.ac.uk/context/datagovuk
graph 8 - http://data.open.ac.uk/context/events/computing
graph 9 - http://data.open.ac.uk/context/events/kmi
graph 10 - http://data.open.ac.uk/context/kis
graph 11 - http://data.open.ac.uk/context/kmiplanet
graph 12 - http://data.open.ac.uk/context/led
graph 13 - http://data.open.ac.uk/context/library
graph 14 - http://data.open.ac.uk/context/meta
graph 15 - http://data.open.ac.uk/context/musow
graph 16 - http://data.open.ac.uk/context/news/crc
graph 17 - http://data.open.ac.uk/context/oldcourses
graph 18 - http://data.open.ac.uk/context/ontology
graph 19 - http://data.open.ac.uk/context/openartsarchive
graph 20 - http://data.open.ac.uk/context/openlearn
graph 21 - http://data.open.ac.uk/context/openlearn2
graph 22 - http://data.open.ac.uk/context/openlearnexplore

graph 23 - http://data.open.ac.uk/context/org/crc
graph 24 - http://data.open.ac.uk/context/oro
graph 25 - http://data.open.ac.uk/context/people/crc
graph 26 - http://data.open.ac.uk/context/people/kmifoaf
graph 27 - http://data.open.ac.uk/context/people/profiles
graph 28 - http://data.open.ac.uk/context/podcast
graph 29 - http://data.open.ac.uk/context/qualification
graph 30 - http://data.open.ac.uk/context/qualification/archive
graph 31 - http://data.open.ac.uk/context/red
graph 32 - http://data.open.ac.uk/context/redperssa
graph 33 - http://data.open.ac.uk/context/technologies/crc
graph 34 - http://data.open.ac.uk/context/topic
graph 35 - http://data.open.ac.uk/context/topic/itunesu
graph 36 - http://data.open.ac.uk/context/videofinder
graph 37 - http://data.open.ac.uk/context/xcri
graph 38 - http://data.open.ac.uk/context/youtube
graph 39 - http://data.open.ac.uk/context/kmifoaf
graph 40 - http://data.open.ac.uk/context/leda
graph 41 - http://www.bigdata.com/rdf#nullGraph

2 Querying https://data.open.ac.uk/query

2.1 Results by query

Query class.sparql - distinct results : 189
Query property.sparql - distinct results : 1316
Query label_class.sparql - distinct results : 4
Query label_property.sparql - distinct results : 2
Query subclass.sparql - distinct results : 0
Query subproperty.sparql - distinct results : 0
Query property_domain.sparql - distinct results : 0
Query property_range.sparql - distinct results : 0
Query indi_range_property.sparql - distinct results : 914
Query indi_domain_property.sparql - distinct results : 2403
Query entity_type.sparql - distinct results : 714483
Total of unique results found 719311 on https://data.open.ac.uk/query

2.2 Error Log

No errors encountered during the process

- Number of errors : 0

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 719311 results does not need query partition

5 Elastic Search Indexation

Index 'class' has been successfully created
Storing 189 results in index 'class' took 7.59 secs

Index 'property' has been successfully created
Storing 1316 results in index 'property' took 1.922 secs

Index 'label_class' has been successfully created
Storing 4 results in index 'label_class' took 1.915 secs

Index 'label_property' has been successfully created
Storing 2 results in index 'label_property' took 1.767 secs

Index 'indi_range_property' has been successfully created
Storing 914 results in index 'indi_range_property' took 3.476 secs

Index 'indi_domain_property' has been successfully created
Storing 2403 results in index 'indi_domain_property' took 3.931 secs

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Query subpartition 1 for entity_type
Total of results to store : 714483
Partition size : 200000
Number of subpartitions : 4
Timesleep : 2 secs

Index 'entity_type' has been successfully created
Storing 200000 results in index 'entity_type' took 35.076 secs

Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 66.491 secs

Index 'entity_type' already exits and will be completed
Storing 200000 results in index 'entity_type' took 53.39 secs

Index 'entity_type' already exits and will be completed
Storing 114483 results in index 'entity_type' took 48.763 secs

6 Getting results and indexing times

Getting results for https://data.open.ac.uk/query took 5 min (324.376 secs)
Indexation for https://data.open.ac.uk/query took 4 min (249.353 secs)