

## \*\*\*\*\*Load Testing Steps and Results\*\*\*\*\*

### \*\*Steps for Testing:\*\*

#### \* Run the Downloader.py

This will download the data URLs in the dataSource folder (url.txt, so far tested with 5 GB of data)

These URLs are picked from url.txt and the file is been downloaded by DownloadManager.py

These downloaded files are fetched, unzipped and extracted in the data folder

\* Run the FusekiParser.py which will fetch the files from the data folder and results in to a parsable file that can be uploaded to the Fuseki server.

\* Run the SPARQL Queries from the Query folder to retrieve the Organization, articles, websites or events related to the Climate change.

### \*\*Results:\*\*

We were able to parallel-parse the data and we were also able to test the data on Fuseki server which fetched us the Organizations, websites, events and articles about the climate change

### \*\*Screenshot of the results:\*\*

Sample Query which retrieves 563983 number of rows on the Fuseki server that is hosted on the cloud.

Reference: Successful post request with 200 OK.

EXAMPLE QUERIES

Selection of triples

Selection of classes

PREFIXES

rdf

rdfs

owl

xsd



SPARQL ENDPOINT

/test\_data\_set/sparql

CONTENT TYPE (SELECT)

JSON

CONTENT TYPE (GRAPH)

Turtle

```
2 GRAPH ?ID {  
3 {  
4   ?subject ?predicate ?object  
5 }  
6 }  
7 }
```



QUERY RESULTS



Table

Raw Response



Showing 1 to 1 of 1 entries

Search:  Show 50 entries

.1

1 "563983"^^xsd:integer

Showing 1 to 1 of 1 entries

```
ssh.cloud.google.com/projects/smart-tour-plann-1572124059601/zones/us-central1-a/instances/instance-with-weather?authuser=0&hl=en_US&projectNumber=784608895559
Connected, host fingerprint: ssh-rsa 0 DA:F3:2B:5A:9F:14:FE:9E:E4:AE:B3:1B:24:F8
:B1:32:92:24:9E:D4:23:A3:17:98:2C:62:9A:4F:02:49:1A:EA
Linux instance-with-weather 4.9.0-11-amd64 #1 SMP Debian 4.9.189-3+deb9u2 (2019-
11-11) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu Feb 27 00:58:18 2020 from 74.125.189.165
pambalam@instance-with-weather:~$ ls
abc apache-jena-fuseki-3.13.1.zip fuseki
pambalam@instance-with-weather:~$ cd fuseki/
pambalam@instance-with-weather:~/fuseki$ ls
apache-jena-fuseki-3.13.1
pambalam@instance-with-weather:~/fuseki$ cd apache-jena-fuseki-3.13.1/
pambalam@instance-with-weather:~/fuseki/apache-jena-fuseki-3.13.1$ ls
bin fuseki fuseki-backup fuseki-server fuseki-server.bat fuseki-server.jar fuseki.service fuseki.war LICENSE NOTICE README run weather webapp
pambalam@instance-with-weather:~/fuseki/apache-jena-fuseki-3.13.1$ java -jar fuseki
fuseki fuseki-backup fuseki-server fuseki-server.bat fuseki-server.jar fuseki.service fuseki.war
pambalam@instance-with-weather:~/fuseki/apache-jena-fuseki-3.13.1$ java -jar fuseki
fuseki fuseki-backup fuseki-server fuseki-server.bat fuseki-server.jar fuseki.service fuseki.war
pambalam@instance-with-weather:~/fuseki/apache-jena-fuseki-3.13.1$ java -jar fuseki-server.jar
[2020-02-29 02:45:12] Server INFO Apache Jena Fuseki 3.13.1
[2020-02-29 02:45:13] Config INFO FUSEKI_HOME=/home/pambalam/fuseki/apache-jena-fuseki-3.13.1/
[2020-02-29 02:45:13] Config INFO FUSEKI_BASE=/home/pambalam/fuseki/apache-jena-fuseki-3.13.1/run
[2020-02-29 02:45:13] Config INFO Shiro file: file:///home/pambalam/fuseki/apache-jena-fuseki-3.13.1/run/shiro.ini
[2020-02-29 02:45:13] Config INFO Configuration file: /home/pambalam/fuseki/apache-jena-fuseki-3.13.1/run/config.ttl
[2020-02-29 02:45:14] Config INFO Load configuration: file:///home/pambalam/fuseki/apache-jena-fuseki-3.13.1/run/configuration/test_data_set.ttl
[2020-02-29 02:45:15] Config INFO Load configuration: file:///home/pambalam/fuseki/apache-jena-fuseki-3.13.1/run/configuration/weather.ttl
[2020-02-29 02:45:15] Config INFO Register: /test_data_set
[2020-02-29 02:45:15] Config INFO Register: /weather
[2020-02-29 02:45:15] Server INFO Started 2020/02/29 02:45:15 UTC on port 3030
[2020-02-29 02:45:42] Admin INFO [1] GET http://35.238.239.155:3030/$/server
[2020-02-29 02:45:42] Admin INFO [1] 200 OK (62 ms)
[2020-02-29 02:45:45] Admin INFO [2] GET http://35.238.239.155:3030/$/server
[2020-02-29 02:45:45] Admin INFO [2] 200 OK (68 ms)
[2020-02-29 02:45:45] Admin INFO [3] GET http://35.238.239.155:3030/$/stats/test_data_set
[2020-02-29 02:45:45] Admin INFO [3] GET stats dataset /test_data_set
[2020-02-29 02:45:45] Admin INFO [3] 200 OK (3 ms)
[2020-02-29 02:45:45] Admin INFO [4] GET http://35.238.239.155:3030/$/stats/test_data_set
[2020-02-29 02:45:45] Admin INFO [4] GET stats dataset /test_data_set
[2020-02-29 02:45:45] Admin INFO [4] 200 OK (4 ms)
[2020-02-29 02:48:13] Fuseki INFO [5] POST http://35.238.239.155:3030/test_data_set/sparql
[2020-02-29 02:48:13] Fuseki INFO [5] Query = select count(?ID) { GRAPH ?ID { ( ?subject ?predicate ?object ) } }
[2020-02-29 02:48:18] Fuseki INFO [5] 200 OK (5.717 s)
```