# Assignment 2 CouchDB Document (ReadMe)

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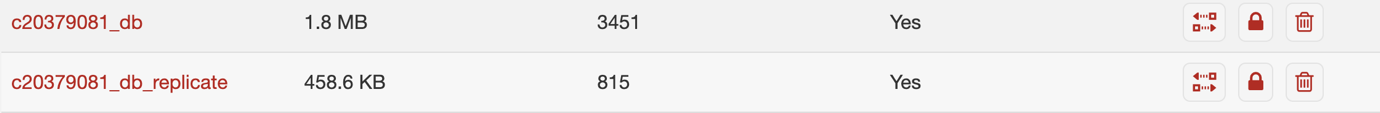
1. **Setup and populate CouchDB implementing replication and partitioning**

The couchDbdata.json file contains the data from my couchdb database. I used a python script to load the data from MariaDB similar to lab 8.

So I used this curl command **http://moose:mooses@127.0.0.1:5984/c20379081\_db/\_all\_docs?include\_docs=true" > data.json,** to get the data from the database**.**

**When loading the data into CouchDB I used a where clause of cpuntyID 1 and 2, to select the data from table. I also link the fact table to the edition, participant and age group dimensional documents.**

This image represents the two databases that were created

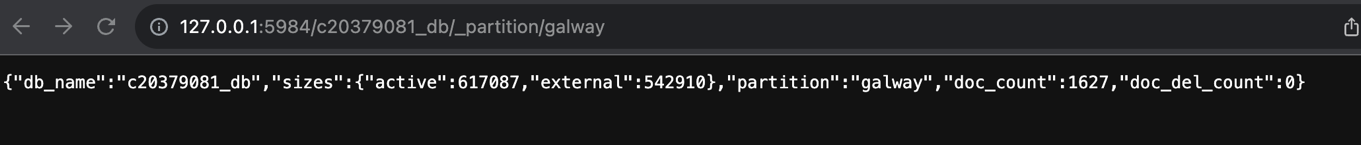


Shows the structure of the fact document for the Cork partition, ID reference to the dimensional documents.

A screenshot of a computer program

Description automatically generated

Show the partitioning for the two counties Galway and Cork in different ways.



A screenshot of a computer

Description automatically generated

This is in the couchDb folder saved as \_replicator.json, it shows the selector which one replicates the records if the vote mode is Facebook.

A screen shot of a computer

Description automatically generated

1. **Implement a global query against the linked documents.**

The global query implemented gives a view of the data across all the partyitions in the database,. Which allows us to see all the documents.

The query first checks if it’s of type ‘fact’ and outputs. Composite key with the ViewerID, VoteDate and VoteMode, it also contains the corresponding dimensional documents ID’S.

I used the composite key to “returns a combination of information from the fact documents as key” and it was the only way I could see it being done.

A screen shot of a computer

Description automatically generatedThe query retrieves documents which provide a full over of the voting activity.

A screenshot of a computer

Description automatically generated

I also implemented another simpler query which uses the \_id as the key and the associated linked dimensional documents. This allows the user to access linked data without needing to create separate queries.

A screenshot of a computer

Description automatically generated

1. **Implement a partitioned query against one type of document.**

My partition query is designed to output documents of type ‘fact’ fromn a specified partition. It returns the ID of the document and viewerID, Votedate and Votemode.

This query was implemented to create an index of the fact documents. The query allows for quicker access to the viewer’s ID, the date they. Voted and the mode which they voted by. Could be used to analyse the votes that have come in and what method of vote was more frequent on what date.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generatedThe image shows the query and the second image shows the output for the cork partition.