

RuthvikSai

## 1) Import `beer-sample` bucket

Dashboard	filter buckets...						
Servers	name ▾	items	resident	ops/sec	RAM used/quota	disk used	
Buckets	beer-sample	7,303	100%	3	35.3MB / 100MB	17.4MB	Documents Statistics
XDCR							
Security							
Settings							
Logs							
Documents							

2) Write a join query to fetch the Top 10 brewery(type="beer") and their country(type="brewery") which produces more varieties of beers.

Dashboard

Servers

Buckets

XDCR

Security

Settings

Logs

Documents

Query

Indexes

Search

Analytics

Eventing

Views

Query Editor

< history (22/22) >

```
1 SELECT {"name":brewery.name,"country":brewery.country},
2 ARRAY_COUNT(ARRAY_AGG(beer.name)) as beerVariety_count
3 FROM `beer-sample` beer LEFT OUTER JOIN `beer-sample` brewery
4 ON KEYS beer.brewery_id WHERE beer.type = 'beer'
5 AND brewery.type = 'brewery'
6 GROUP BY brewery.name, brewery.country
7 ORDER BY ARRAY_COUNT(ARRAY_AGG(beer.name))
8 desc LIMIT 10 ;
```

Execute

Explain

Advise

success just now | elapsed: 8.9s | execution: 8.9s | docs: 10 | size: 1459 bytes

format

Query Results

Table JSON Tree Plan Plan Text Advice

```
3  "$1": {
4    "country": "United States",
5    "name": "Midnight Sun Brewing Co."
6  },
7  "beerVariety_count": 57
8  },
9  {
10  "$1": {
11    "country": "United States",
```

3. Write a mapreduce to get the number of breweries based on country.

Please attach the mapreduce code and json output screenshot.

XDCR  
Security  
Settings  
Logs  
Documents  
Query  
Indexes  
Search  
Analytics  
Eventing  
Views

Map

```
1 function (doc, meta) {  
2   if(doc.type=="brewery")  
3     emit(doc.country, 1);  
4 }
```

Reduce (built in: \_count, \_sum, \_stats)

```
1 _count
```

Results

filter: ?limit=6&stale=false&connection\_timeout=60000&inclusive\_end=true&reduce=true&skip=0&full\_set=true&group=true

Development Time Subset Full Cluster Data Set

< > Show Results

Key	Value
-----	-------

Development Time Subset	Full Cluster Data Set	< > Show Results
Key		Value
""	undefined	1
"Argentina"	undefined	2
"Aruba"	undefined	1
"Australia"	undefined	14
"Austria"	undefined	10
"Belgium"	undefined	99

Development Time Subset	Full Cluster Data Set	< > Show Results
Key		Value
"Togo"	undefined	1
"United Kingdom"	undefined	79
"United States"	undefined	875
"Viet Nam"	undefined	2

#### 4. XDCR:

a) Add a new bucket “Brewery”.

b) Create a XDCR with a filter(type='brewery') to replicate only the brewery entity from `beer-sample` bucket.

The screenshot shows the 'Add Replication' dialog box in the saidb XDCR Replications interface. The dialog has a blue header with the title 'Add Replication' and a close button 'X'. The background interface shows a sidebar with navigation options: Dashboard, Servers, Buckets, XDCR, Security, Settings, Logs, Documents, Query, Indexes, Search, Analytics, Eventing, and Views. The main content area is titled 'XDCR Replications' and has buttons for 'ADD REPLICATION' and 'ADD REMOTE'. The dialog fields are as follows:

- Replicate From Bucket:** A dropdown menu with 'beer-sample' selected.
- Remote Cluster:** A dropdown menu with 'sal\_remote' selected.
- Remote Bucket:** A text input field containing 'Brewery'.
- Replication Priority:** A dropdown menu with 'High' selected.
- Replication Filters:** A section with a 'Filter Expression' field containing 'REGEXP\_CONTAINS(type, "brewery")' and a 'Test Filter' button.
- Deletion Filters:** A checkbox labeled 'Do not replicate document expirations' which is currently unchecked.

The screenshot shows the 'XDCR Replications' page in the saidb interface. The page has a blue header with the title 'saidb > XDCR Replications' and buttons for 'ADD REPLICATION' and 'ADD REMOTE'. The background interface shows a sidebar with navigation options: Dashboard, Servers, Buckets, XDCR, Security, Settings, Logs, Documents, Query, Indexes, Search, Analytics, Eventing, and Views. The main content area is titled 'XDCR Replications' and contains two tables:

Remote Clusters	
name	IP/hostname
sal_remote	127.0.0.1:8091

Outgoing Replications			
source bucket	destination bucket	remote cluster	status
beer-sample <small>filter</small>	Brewery	sal_remote	replicating

Dashboard

Servers

Buckets

XDCR

Security

Settings

Logs

Documents

Query

Indexes

Search

Analytics

Eventing

Views

Bucket

show top keys

Limit 10

Offset 0

Document ID optional...

show range

N1QL WHERE no indexes available...

Retrieve Docs

10 Results for Brewery, limit: 10, offset: 0

enable field editing

< prev batch | next batch >

	id	
<div><div></div><div></div><div></div><div></div></div>	21st_amendment_brewery_cafe	{\"address\":[\"563 Second Street\"],\"city\":\"San Francisco\",\"code\":\"94107\",\"country\":\"United States\",\"description\":\"The 21st Amendment Brewery offers a variety of award winning house made brews a Americ...
<div><div></div><div></div><div></div><div></div></div>	357	{\"address\": [],\"city\":\"\",\"code\":\"\",\"country\":\"\",\"description\":\"\",\"name\":\"357\",\"phone\":\"\",\"state\":\"\",\"type\":\"brewery\",\"updated:010-07-22 20:00:20\",\"website\":\"\"}
<div><div></div><div></div><div></div><div></div></div>	3_fonteinen_brouwerij_ambachtelijke_geu zestekerij	{\"address\":[\"Hoogstraat 2A\"],\"city\":\"Beersel\",\"code\":\"\",\"country\":\"Belgium\",\"description\":\"\",\"geo\":{\"accuracy\":\"RANGE_INTERPOLATED\",\"lat\":50.7668,\"lon\":4.3081},\"name\":\"3 Fonteinen Brouwerij Ambachteli
<div><div></div><div></div><div></div><div></div></div>	512_brewing_company	{\"address\":[\"407 Radam, F200\"],\"city\":\"Austin\",\"code\":\"78745\",\"country\":\"United States\",\"description\":\"(512) Brewing Company is a microbrewery located in the heart of Austin that brews for the communi...
<div><div></div><div></div><div></div><div></div></div>	aass_brewery	{\"address\":[\"Ole Steensgt. 10 Postboks 1530\"],\"city\":\"Drammen\",\"code\":\"\",\"country\":\"Norway\",\"description\":\"Brewery was established in 1834 and is the oldest brewery in Norway today. It is located...
<div><div></div><div></div><div></div><div></div></div>	abbaye_de_leffe	{\"address\":[\"Dinant\"],\"city\":\"Dinant\",\"code\":\"\",\"country\":\"Belgium\",\"description\":\"\",\"geo\":{\"accuracy\":\"APPROXIMATE\",\"lat\":50.2606,\"lon\":4.9122},\"name\":\"Abbaye de Leffe\",\"phone\":\"\",\"state\":\"Namur\",\"ty...
<div><div></div><div></div><div></div><div></div></div>	abbaye_de_maredsous	{\"address\":[\"Rue de Maredsous, 11\"],\"city\":\"Dene\",\"code\":\"\",\"country\":\"Belgium\",\"description\":\"\",\"geo\":

Dashboard

Servers

Buckets

XDCR

Security

Settings

Logs

Documents

Query

filter buckets...

name	items	resident	ops/sec	RAM used/quota	disk used	
beer-sample	7,303	100%	0	37.2MB / 100MB	25.5MB	Documents Statistics
Brewery	1,412	100%	0	30.9MB / 1.27GB	7.31MB	Documents Statistics

## 5. CLI:

a) Add a new bucket “Beer”.

b) Using CLI - do a cbexport of the entire `beer-sample`

c) And do a cbimport with “brewery\_id” as primary key. As a result, in the



new bucket - only “beer” documents will be imported with their

respective brewery name as meta().id

```
C:\Program Files\Couchbase\Server\bin>couchbase-cli bucket-create -c 127.0.0.1 --username Administrator --password password --bucket Beer --bucket-type couchbase --bucket-ramsize 101
SUCCESS: Bucket created
```

```
C:\Program Files\Couchbase\Server\bin>cbexport json -c couchbase://127.0.0.1 -u Administrator -p password -b beer-sample
-o C:/Users/user/Documents/Sai/NosqlAssignment/beer-sample.json -f lines -t 4
2021-02-19T11:34:48.295+05:30 WARN: (Couchbase) Unexpected error 'operation timed out after 5s' while trying to get sequence numbers, will retry in 5s -- couchbase.GetSequenceNumbers() at sequence_numbers.go:38
2021-02-19T11:35:03.305+05:30 WARN: (Couchbase) Unexpected error 'operation timed out after 10s' while trying to get sequence numbers, will retry in 10s -- couchbase.GetSequenceNumbers() at sequence_numbers.go:38
Json exported to `C:/Users/user/Documents/Sai/NosqlAssignment/beer-sample.json` successfully
Documents exported: 7303 Documents skipped: 0
```

```
C:\Program Files\Couchbase\Server\bin>cbimport json -c couchbase://127.0.0.1 -u Administrator -p password -b Beer -f lines -d file://C:/Users/user/Documents/Sai/NosqlAssignment/beer-sample.json -t 4 -g %brewery_id%
2021-02-19T11:39:07.659+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
2021-02-19T11:39:07.681+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
2021-02-19T11:39:07.693+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
2021-02-19T11:39:07.696+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
2021-02-19T11:39:07.697+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
2021-02-19T11:39:07.699+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
2021-02-19T11:39:07.700+05:30 ERROR: Error in key expression at char 0, field 'brewery_id' does not exist -- jsongdata.(*Parallelizer).Execute.func1() at source.go:217
```

Beer	1,329	100%	0	30.7MB / 101MB	7MB	<a href="#">Documents</a> <a href="#">Statistics</a>
beer-sample	7,303	44.2%	0	37.2MB / 100MB	31MB	<a href="#">Documents</a> <a href="#">Statistics</a>
Brewery	1,412	100%	0	30.9MB / 102MB	7.31MB	<a href="#">Documents</a> <a href="#">Statistics</a>
Type: Couchbase						
Bucket RAM Quota: 102MB						
Cluster RAM Quota: 1.36GB						
Replicas: 1						
Server Nodes: 1						
Ejection Method: Value-Only						
Conflict Resolution: Sequence Number						
Compaction: Not active						
<strong>Memory</strong>				<strong>Disk</strong>		
						
other buckets (201 MB)				other buckets (38 MB)		
this bucket (102 MB)				this bucket (7.31 MB)		
remaining (1.07 GB)				remaining (21.3 GB)		
				<button>Delete</button> <button>Compact</button> <button>Edit</button>		