

I was just trying to understand things in a simple Eventing example and got some seriously weird behavior in Eventing.

Couchbase: Enterprise Edition 6.5.0 build 413

Linux (Debian 8 jessie)

```
uname -a
```

```
Linux couch01 3.16.0-10-amd64 #1 SMP Debian 3.16.70-1 (2019-07-22) x86_64 GNU/Linux
```

If I have Eventing active and it is completely caught up (all data processed) as per the example URL above and have deployed with “Everything” at least once, odd thing happen if I redeploy with “From now”

First:

If I stop and restart the server should it actually kick of the "verifier" function again? I think if we actually processed all items (with “Everything” or especially with “From now” there shouldn’t be any CPU as long as there is no new data)

Why does Eventing actually re-run after any full system Couchbase server stop / start (when a Function was initially deployed under either “Everything” and also “From now”).

- A) Intuitively once Eventing has been run on “Everything” then it should automatically switch to to a state of “From now” (it makes no sense to leave it in “Everything”)
- B) Then if we stop / start Couchbase (I use a single node) it should never kick off a reprocessing of all data.

Oddly when I deploy as “From now” why is there any processing at all as no mutations have happened, then when I stop/start my Couchbase node why does it reprocess again.

SETUP

Setup: <https://eventing-workshop.s3.amazonaws.com/Instructions.pdf>

(not the bucket should be made ‘meta’ not ‘metadata’ if you import verifier.json)

ALL WORKS FIN INITIALLY

Working as expected (as long as you deploy with “From now” and never select “Everything”)

At first things work correctly if and only if you deploy “From now”, you can deploy and un-deploy dozens of times and you will not get an item in the “review” bucket”

Now with the function “verifier” undeployed we depoloy it another time with “Everything”, this also works as expected.

Now we can undeploy the verifier function.

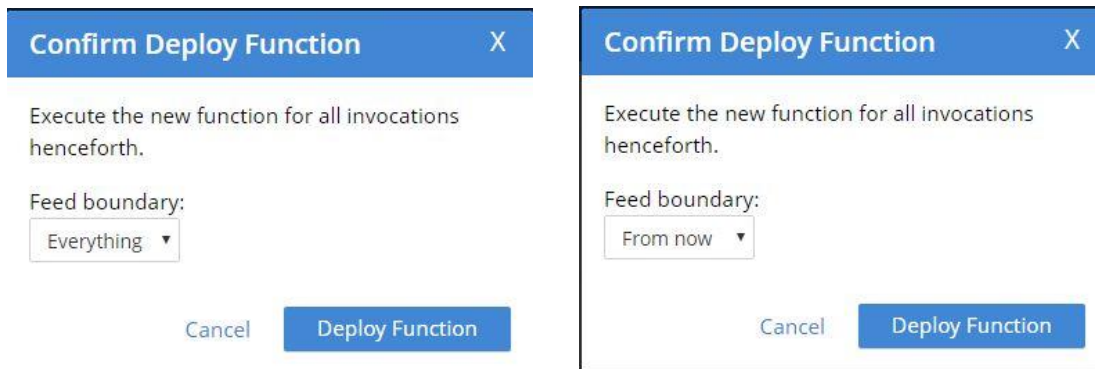
At this point the system is seems to have an issue as the “Everything” is now “sticky”. If we flush “review” e.g. it will have zero items and we now deploy with “From now” the system will run as if the end user selected “Everything”!

So in other words now deploying with “Everything” and “From now” seems to have identical behavior and process all data resulting in 26 review items.

Deploying with “Everything” and “From now” seems to have identical behavior

name ▾	items	resident	ops/sec	RAM used/quota	
meta	0	100%	0	18.8MB / 1GB	Documents Statistics
register	5,405	100%	0	22.9MB / 1GB	Documents Statistics
review	0	100%	0	31MB / 1GB	Documents Statistics

Initial buckets



Deploy as either “Everything or “From Now”
I notice no difference in behavior

RESTORE EXPECTED BEHAVIOR

Warning this may not work if the function is deployed, so undeploy it first

Okay if I use the ./cbeventing tool from CBSE-6420 and do the following:

```
./cbeventing -list
```

```
./cbeventing -flush
```

```
./cbeventing -list
```

flush the “review” bucket (and the meta bucket if it is non-zero)

Stop my single node cluster and restart my single node cluster

At this point I can reload my function “verifier” and deploy it as “From now” and it works as expected.

Actual commands to clean up:

```
root@couch01:~/eventing# ./cbeventing -list
2019/08/30 23:04:00 /eventing/tempchecksum/verifier
2019/08/30 23:04:00 /eventing/tempApps/verifier/0
2019/08/30 23:04:00 /eventing/checksum/verifier
2019/08/30 23:04:00 /eventing/apps/verifier/0
2019/08/30 23:04:00 /eventing/appsettings/verifier
2019/08/30 23:04:00 /eventing/config/keepNodes
2019/08/30 23:04:00 /eventing/rebalanceToken/34001b9e539151890271b75cb117fe95
2019/08/30 23:04:00 /eventing/settings/config

root@couch01:~/eventing# ./cbeventing -flush
2019/08/30 23:04:09 Deleted /eventing/tempchecksum/verifier
2019/08/30 23:04:09 Deleted /eventing/tempApps/verifier/0
2019/08/30 23:04:09 Deleted /eventing/checksum/verifier
2019/08/30 23:04:09 Deleted /eventing/apps/verifier/0
2019/08/30 23:04:09 Deleted /eventing/appsettings/verifier
2019/08/30 23:04:09 Skipping deletion of /eventing/config/keepNodes
2019/08/30 23:04:09 Skipping deletion of
/eventing/rebalanceToken/34001b9e539151890271b75cb117fe95
2019/08/30 23:04:09 Skipping deletion of /eventing/settings/config

root@couch01:~/eventing# ./cbeventing -list
2019/08/30 23:04:14 /eventing/config/keepNodes
2019/08/30 23:04:14 /eventing/rebalanceToken/34001b9e539151890271b75cb117fe95
2019/08/30 23:04:14 /eventing/settings/config

root@couch01:~/eventing# curl -X POST \
'http://Administrator:password@localhost:8091/pools/default/buckets/meta/controller/doFlush'

root@couch01:~/eventing# curl -X POST \
'http://Administrator:password@localhost:8091/pools/default/buckets/review/controller/doFlush'

root@couch01:~/eventing# systemctl stop couchbase-server

root@couch01:~/eventing# systemctl start couchbase-server
```

Now import the verifier.json handler again make sure the Metadata Bucket is “meta” in case you do an import as the verifier.json isn’t 100% right.

Deploy “verifier” “From now” it will complete and NO items will go to review (as expected)

name ▾	items	resident	ops/sec	RAM used/quota	
meta	2,048	100%	0	20.8MB / 1GB	Documents Statistics
register	5,405	100%	0	25MB / 1GB	Documents Statistics
review	0	100%	0	19MB / 1GB	Documents Statistics

No items in review (we deployed “From Now”)
but there was a lot of CPU to make 2,048 items in meta.

Now stop/start th single Couchbase node

▼ Eventing Stats: verifier

⚠ Metrics for Eventing are not per bucket and will not change if bucket dropdown above is changed



0 Processed
per server



0 Failures
per server



1532 Backlog
per server



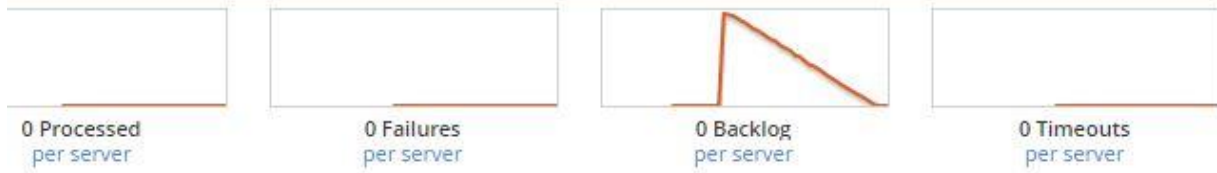
0 Timeouts
per server

We have a lot of CPU and processing after the restart

When the CPU goes idle as expected we have no items in the “review” bucket.

name ▾	items	resident	ops/sec	RAM used/quota	
meta	2,048	100%	1142	22.6MB / 1GB	Documents Statistics
register	5,405	100%	570	25MB / 1GB	Documents Statistics
review	0	100%	572	19MB / 1GB	Documents Statistics

Metrics for Eventing are not per bucket and will not change if bucket dropdown above is changed

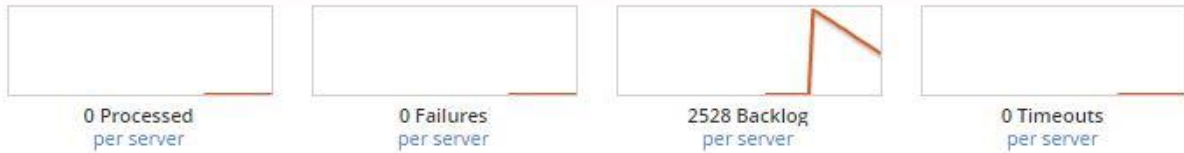


Stats for Eventing: Verifier (initial after deploying)

name ▾	items	resident	ops/sec	RAM used/quota	
meta	2,048	100%	0	61MB / 1GB	Documents Statistics
register	5,405	100%	0	25MB / 1GB	Documents Statistics
review	26	100%	0	19MB / 1GB	Documents Statistics

Buckets after initial run

Metrics for Eventing are not per bucket and will not change if bucket dropdown above is changed



Increasing XDCB Operations

Stats2-N

The same after stopping a single node Couchbase server and restarting it
always reprocesses over and over
maybe it doesn't make a new item bt it sure uses CPU