# 1 Couchbase CheatSheet

Tools

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- PDF Link: cheatsheet-couchbase-A4.pdf, Category: tools
- Blog URL: https://cheatsheet.dennyzhang.com/cheatsheet-couchbase-A4
- Related posts: Elasticsearch CheatSheet, #denny-cheatsheets

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## 1.1 Couchbase Summary

| Name                    | Command                                                                                |
|-------------------------|----------------------------------------------------------------------------------------|
| Check couchbase version | <pre>grep version /opt/couchbase/etc/runtime.ini, cat /opt/couchbase/VERSION.txt</pre> |
| Get version             | ${\operatorname{cat\ /opt/couchbase/VERSION.txt}}$                                     |
| Check couchbase status  | /etc/init.d/couchbase-server status                                                    |
| couchbase web console   | http://localhost:8091 Administrator/password                                           |
| cbdump-config           | /opt/couchbase/bin/cbdump-config                                                       |
| pre configuration       | /opt/couchbase/var/lib/couchbase/config/config.dat                                     |
| log files               | /opt/couchbase/var/lib/couchbase/logs                                                  |
| Flush cb bucket by api  | flush-cb-bucket.sh                                                                     |

## 1.2 Couchbase CLI

| Name                         | Command                                                      |
|------------------------------|--------------------------------------------------------------|
| couchbase-cli                | /opt/couchbase/bin/couchbase-cli                             |
| backup couchbase             | /opt/couchbase/bin/cbbackup http://localhost:8091 /backup-42 |
| List buckets                 | /opt/couchbase/bin/couchbase-cli bucket-list -c localhost    |
| Check bucket RAM usage       | cbstats -b \$bucket_name 127.0.0.1:11210 memory              |
| Create bucket                | See sample-couchbase-cli.sh                                  |
| Load sample data             | See sample-couchbase-cli.sh                                  |
| Reset couchbase passwd       | See sample-couchbase-cli.sh                                  |
| Initialize couchbase cluster | See sample-couchbase-cli.sh                                  |

## 1.3 Couchbase REST API

|   | Name                  | Command                                                                                 |
|---|-----------------------|-----------------------------------------------------------------------------------------|
|   | List buckets          | curl -u \$username:\$passwd http://\$es_ip:8091/pools/default/buckets                   |
| ( | Get couchbase nodes   | curl -u \$username: \$passwd \$couchbase_ip: 8091/pools/default                         |
|   | Remove couchbase node | curl -u \$username:\$passwd -d otpNode=ns_1@172.17.1.71 http://172.17.1.71:8091/control |

## 1.4 couchbase-cli Online Usage

```
> couchbase-cli help
couchbase-cli - command-line cluster administration tool
```

usage: couchbase-cli COMMAND CLUSTER [OPTIONS]

#### COMMAND:

| server-list      | list all servers in a cluster                      |
|------------------|----------------------------------------------------|
| server-info      | show details on one server                         |
| server-add       | add one or more servers to the cluster             |
| server-readd     | readd a server that was failed over                |
| group-manage     | manage server groups                               |
| rebalance        | start a cluster rebalancing                        |
| rebalance-stop   | stop current cluster rebalancing                   |
| rebalance-status | show status of current cluster rebalancing         |
| failover         | failover one or more servers                       |
| cluster-init     | set the username, password and port of the cluster |
| cluster-edit     | modify cluster settings                            |

node-init set node specific parameters bucket-list list all buckets in a cluster bucket-create add a new bucket to the cluster bucket-edit modify an existing bucket bucket-delete delete an existing bucket bucket-flush flush all data from disk for a given bucket bucket-compact compact database and index data setting-compaction set auto compaction settings setting-notification set notification settings setting-alert set email alert settings setting-autofailover set auto failover settings setting-xdcr set xdcr related settings manage cluster certificate
manage read only user ssl-manage user-manage set up XDCR connection xdcr-setup xdcr-replicate xdcr operations show longer usage/help and examples help CLUSTER: --cluster=HOST[:PORT] or -c HOST[:PORT] OPTIONS: -u USERNAME, --user=USERNAME admin username of the cluster -p PASSWORD, --password=PASSWORD admin password of the cluster -o KIND, --output=KIND KIND is json or standard -d, --debug server-add OPTIONS: --server-add=HOST[:PORT] server to be added --server-add-username=USERNAME admin username for the server to be added --server-add-password=PASSWORD admin password for the server to be added --group-name=GROUPNAME group that server belongs server-readd OPTIONS: --server-add=HOST[:PORT] server to be added --server-add-username=USERNAME admin username for the server to be added --server-add-password=PASSWORD admin password for the server to be added --group-name=GROUPNAME group that server belongs rebalance OPTIONS: see server-add OPTIONS --server-add\* --server-remove=HOST[:PORT] the server to be removed group-manage OPTIONS: --group-name=GROUPNAME group name --create create a new group --delete delete an empty group --list show group/server relationship map --rename=NEWGROUPNAME rename group to new name --add-servers=HOST[:PORT];HOST[:PORT] add a list of servers to group --move-servers=HOST[:PORT];HOST[:PORT] move a list of servers from group

#### failover OPTIONS:

--from-group=GROUPNAME

--to-group=GROUPNAME

group name that to move servers from

group name tat to move servers to

server to failover

--server-failover=HOST[:PORT]

```
cluster-* OPTIONS:
  --cluster-username=USER
                                    new admin username
  --cluster-password=PASSWORD
                                    new admin password
  --cluster-port=PORT
                                    new cluster REST/http port
  --cluster-ramsize=RAMSIZEMB
                                    per node ram quota in MB
node-init OPTIONS:
  --node-init-data-path=PATH
                                    per node path to store data
  --node-init-index-path=PATH
                                    per node path to store index
bucket-* OPTIONS:
  --bucket=BUCKETNAME
                                    bucket to act on
  --bucket-type=TYPE
                                    memcached or couchbase
  --bucket-port=PORT
                                    supports ASCII protocol and is auth-less
                                    standard port, exclusive with bucket-port
  --bucket-password=PASSWORD
  --bucket-ramsize=RAMSIZEMB
                                    ram quota in MB
  --bucket-replica=COUNT
                                    replication count
  --enable-flush=[0|1]
                                    enable/disable flush
                                    enable/disable index replicas
  --enable-index-replica=[0|1]
  --wait
                                    wait for bucket create to be complete before returning
  --force
                                     force to execute command without asking for confirmation
  --data-only
                                     compact datbase data only
  --view-only
                                     compact view data only
setting-compaction OPTIONS:
  --compaction-db-percentage=PERCENTAGE
                                             at which point database compaction is triggered
  --compaction-db-size=SIZE[MB]
                                             at which point database compaction is triggered
  --compaction-view-percentage=PERCENTAGE
                                             at which point view compaction is triggered
  --compaction-view-size=SIZE[MB]
                                             at which point view compaction is triggered
  --compaction-period-from=HH:MM
                                             allow compaction time period from
  --compaction-period-to=HH:MM
                                             allow compaction time period to
  --enable-compaction-abort=[0|1]
                                             allow compaction abort when time expires
  --enable-compaction-parallel=[0|1]
                                             allow parallel compaction for database and view
                                            how frequently a node will purge metadata on deleted items
  --metadata-purge-interval=DAYS
setting-notification OPTIONS:
  --enable-notification=[0|1]
                                             allow notification
setting-alert OPTIONS:
  --enable-email-alert=[0|1]
                                             allow email alert
  --email-recipients=RECIPIENT
                                             email recipents, separate addresses with , or ;
  --email-sender=SENDER
                                             sender email address
  --email-user=USER
                                             email server username
  --email-password=PWD
                                             email server password
  --email-host=HOST
                                             email server host
  --email-port=PORT
                                             email server port
  --enable-email-encrypt=[0|1]
                                             email encrypt
  --alert-auto-failover-node
                                            node was auto failover
  --alert-auto-failover-max-reached
                                            maximum number of auto failover nodes was reached
                                            node wasn't auto failover as other nodes are down at the same tim
  --alert-auto-failover-node-down
                                            node wasn't auto fail over as cluster was too small
  --alert-auto-failover-cluster-small
                                            node ip address has changed unexpectedly
  --alert-ip-changed
                                             disk space used for persistent storgage has reached at least 90%
  --alert-disk-space
  --alert-meta-overhead
                                             metadata overhead is more than 50%
  --alert-meta-oom
                                             bucket memory on a node is entirely used for metadata
  --alert-write-failed
                                             writing data to disk for a specific bucket has failed
```

```
setting-autofailover OPTIONS:
  --enable-auto-failover=[0|1]
                                             allow auto failover
  --auto-failover-timeout=TIMEOUT (>=30)
                                             specify timeout that expires to trigger auto failover
setting-xdcr OPTIONS:
                                          maximum concurrent replications per bucket, 8 to 256.
  --max-concurrent-reps=[32]
                                          intervals between checkpoints, 60 to 14400 seconds.
  --checkpoint-interval=[1800]
  --worker-batch-size=[500]
                                          doc batch size, 500 to 10000.
  --doc-batch-size=[2048]KB
                                          document batching size, 10 to 100000 KB
  --failure-restart-interval=[30]
                                          interval for restarting failed xdcr, 1 to 300 seconds
  --optimistic-replication-threshold=[256] document body size threshold (bytes) to trigger optimistic replica
xdcr-setup OPTIONS:
  --create
                                          create a new xdcr configuration
  --edit
                                          modify existed xdcr configuration
  --delete
                                          delete existed xdcr configuration
  --xdcr-cluster-name=CLUSTERNAME
                                          cluster name
  --xdcr-hostname=HOSTNAME
                                         remote host name to connect to
  --xdcr-username=USERNAME
                                         remote cluster admin username
                                         remote cluster admin password
  --xdcr-password=PASSWORD
  --xdcr-demand-encryption=[0|1]
                                          allow data encrypted using ssl
  --xdcr-certificate=CERTIFICATE
                                          pem-encoded certificate. Need be present if xdcr-demand-encryption i
xdcr-replicate OPTIONS:
  --create
                                          create and start a new replication
  --delete
                                          stop and cancel a replication
  --list
                                          list all xdcr replications
                                          local bucket name to replicate from
  --xdcr-from-bucket=BUCKET
  --xdcr-clucter-name=CLUSTERNAME
                                          remote cluster to replicate to
  --xdcr-to-bucket=BUCKETNAME
                                          remote bucket to replicate to
user-manage OPTIONS:
  --set
                                          create/modify a read only user
  --list
                                          list any read only user
  --delete
                                          delete read only user
                                          readonly user name
  --ro-username=USERNAME
                                          readonly user password
  --ro-password=PASSWORD
ssl-manage OPTIONS:
  --retrieve-cert=CERTIFICATE
                                          retrieve cluster certificate AND save to a pem file
  --regenerate-cert=CERTIFICATE
                                          regenerate cluster certificate AND save to a pem file
The default PORT number is 8091.
EXAMPLES:
  Set data path for an unprovisioned cluster:
    couchbse-cli node-init -c 192.168.0.1:8091 \
       --node-init-data-path=/tmp/data \
       --node-init-index-path=/tmp/index \
       -u Administrator -p password
  List servers in a cluster:
    couchbase-cli server-list -c 192.168.0.1:8091
  Server information:
    couchbase-cli server-info -c 192.168.0.1:8091
  Add a node to a cluster, but do not rebalance:
    couchbase-cli server-add -c 192.168.0.1:8091 \
```

```
--server-add=192.168.0.2:8091 \
     --server-add-username=Administrator1 \
     --server-add-password=password1 \
     --group-name=group1 \
     -u Administrator -p password
Add a node to a cluster and rebalance:
  couchbase-cli rebalance -c 192.168.0.1:8091 \
     --server-add=192.168.0.2:8091 \
     --server-add-username=Administrator1 \
     --server-add-password=password1 \
     --group-name=group1 \
     -u Administrator -p password
Remove a node from a cluster and rebalance:
  couchbase-cli rebalance -c 192.168.0.1:8091 \
     --server-remove=192.168.0.2:8091 \
     -u Administrator -p password
Remove and add nodes from/to a cluster and rebalance:
 couchbase-cli rebalance -c 192.168.0.1:8091 \
    --server-remove=192.168.0.2 \
   --server-add=192.168.0.4 \
   --server-add-username=Administrator1 \
   --server-add-password=password1 \
   --group-name=group1 \
    -u Administrator -p password
Stop the current rebalancing:
  couchbase-cli rebalance-stop -c 192.168.0.1:8091 \
     -u Administrator -p password
Set the username, password, port and ram quota:
  couchbase-cli cluster-init -c 192.168.0.1:8091 \
     --cluster-init-username=Administrator \
     --cluster-init-password=password \
     --cluster-init-port=8080 \
     --cluster-init-ramsize=300
change the cluster username, password, port and ram quota:
  couchbase-cli cluster-edit -c 192.168.0.1:8091 \
     --cluster-username=Administrator1 \
     --cluster-password=password1 \
     --cluster-port=8080 \
     --cluster-ramsize=300 \
     -u Administrator -p password
Change the data path:
  couchbase-cli node-init -c 192.168.0.1:8091 \
     --node-init-data-path=/tmp \
     -u Administrator -p password
List buckets in a cluster:
  couchbase-cli bucket-list -c 192.168.0.1:8091
Create a new dedicated port couchbase bucket:
  couchbase-cli bucket-create -c 192.168.0.1:8091 \
     --bucket=test_bucket \
     --bucket-type=couchbase \
```

```
--bucket-port=11222 \setminus
     --bucket-ramsize=200 \
     --bucket-replica=1 \
     -u Administrator -p password
Create a couchbase bucket and wait for bucket ready:
 couchbase-cli bucket-create -c 192.168.0.1:8091 \
     --bucket=test_bucket \
     --bucket-type=couchbase \
     --bucket-port=11222 \
     --bucket-ramsize=200 \
     --bucket-replica=1 \
     --wait \
     -u Administrator -p password
Create a new sasl memcached bucket:
  couchbase-cli bucket-create -c 192.168.0.1:8091 \
     --bucket=test_bucket \
     --bucket-type=memcached \
     --bucket-password=password \
     --bucket-ramsize=200 \
     --enable-flush=1 \
     -u Administrator -p password
Modify a dedicated port bucket:
 couchbase-cli bucket-edit -c 192.168.0.1:8091 \
     --bucket=test_bucket \
     --bucket-port=11222 \
     --bucket-ramsize=400 \
     --enable-flush=1 \
     -u Administrator -p password
Delete a bucket:
 couchbase-cli bucket-delete -c 192.168.0.1:8091 \
     --bucket=test_bucket
Flush a bucket:
  couchbase-cli bucket-flush -c 192.168.0.1:8091 \
     --force \
     -u Administrator -p password
Compact a bucket for both data and view
 couchbase-cli bucket-compact -c 192.168.0.1:8091 \
      --bucket=test_bucket \
      -u Administrator -p password
Compact a bucket for data only
 couchbase-cli bucket-compact -c 192.168.0.1:8091 \
      --bucket=test_bucket \
      --data-only \
      -u Administrator -p password
Compact a bucket for view only
  couchbase-cli bucket-compact -c 192.168.0.1:8091 \
      --bucket=test_bucket \
      --view-only \
      -u Administrator -p password
```

Create a XDCR remote cluster

```
couchbase-cli xdcr-setup -c 192.168.0.1:8091 \
      --create \
      --xdcr-cluster-name=test \
      --xdcr-hostname=10.1.2.3:8091 \
      --xdcr-username=Administrator1 \
      --xdcr-password=password1 \
      --xdcr-demand-encryption=1 \
      --xdcr-certificate=/tmp/test.pem \
      -u Administrator -p password
Delete a XDCR remote cluster
  couchbase-cli xdcr-setup -delete -c 192.168.0.1:8091 \
      --xdcr-cluster-name=test \
      -u Administrator -p password
Start a replication stream in memcached protocol
 couchbase-cli xdcr-replicate -c 192.168.0.1:8091 \
      --create \
      --xdcr-cluster-name=test \
      --xdcr-from-bucket=default \
      --xdcr-to-bucket=default1 \
      --xdcr-replication-mode=xmem \
      -u Administrator -p password
Start a replication stream in capi protocol
 couchbase-cli xdcr-replicate -c 192.168.0.1:8091 \
     --create \
      --xdcr-cluster-name=test \
      --xdcr-from-bucket=default \
      --xdcr-to-bucket=default1 \
      --xdcr-replication-mode=capi \
      -u Administrator -p password
Delete a replication stream
  couchbase-cli xdcr-replicate -c 192.168.0.1:8091 \
      --delete \
      --xdcr-replicator=f4eb540d74c43fd3ac6d4b7910c8c92f/default/default \
      -u Administrator -p password
List all xdcr replication streams
 couchbase-cli xdcr-replicate -c 192.168.0.1:8091 \
      --list \
      -u Administrator -p password
List read only user in a cluster:
  couchbase-cli user-manage --list -c 192.168.0.1:8091 \
         -u Administrator -p password
Delete a read only user in a cluster
 couchbase-cli user-manage -c 192.168.0.1:8091 \
      --delete --ro-username=readonlyuser \
      -u Administrator -p password
create/modify a read only user in a cluster
  couchbase-cli user-manage -c 192.168.0.1:8091 \
      --set --ro-username=readonlyuser --ro-password=readonlypassword \
      -u Administrator -p password
Create a new group
```

```
couchbase-cli group-manage -c 192.168.0.1:8091 \
        --create --group-name=group1 -u Administrator -p password
  Delete an empty group
   couchbase-cli group-manage -c 192.168.0.1:8091 \
        --delete --group-name=group1 -u Administrator -p password
  Rename an existed group
   couchbase-cli group-manage -c 192.168.0.1:8091 \
        --rename=newgroup --group-name=group1 -u Administrator -p password
  Show group/server map
   couchbase-cli group-manage -c 192.168.0.1:8091 \
        --list -u Administrator -p password
  Add a server to a group
   couchbase-cli group-manage -c 192.168.0.1:8091 \
        --add-servers="10.1.1.1:8091;10.1.1.2:8091" \
        --group-name=group1 \
        --server-add-username=Administrator1 \
        --server-add-password=password1 \
        -u Administrator -p password
  Move list of servers from group1 to group2
   couchbase-cli group-manage -c 192.168.0.1:8091 \
        --move-servers="10.1.1.1:8091;10.1.1.2:8091" \
        --from-group=group1 \
        --to-group=group2 \
        -u Administrator -p password
  Download a cluster certificate
   couchbase-cli ssl-manage -c 192.168.0.1:8091 \
        --retrieve-cert=/tmp/test.pem \
        -u Administrator -p password
  Regenerate AND download a cluster certificate
    couchbase-cli ssl-manage -c 192.168.0.1:8091 \
        --regenerate-cert=/tmp/test.pem \
        -u Administrator -p password
root@testmini1:/opt/couchbase/bin#
root@testmini1:/cloudpass/backend/build/bin# cd /opt/couchbase/bin
root@testmini1:/opt/couchbase/bin# ls
                   cbworkloadgen dump-
couchbase-cli ebuck
couchbase-server epmd
couch_compact erl
cbbackup
                                           dump-guts
                                                            install
cbbrowse_logs
                                           ebucketmigrator makeconv
cbcollect_info
                                                          memcached
                                                           moxi
cbdump-config
                                           erlc
                                                           reports
cbenable_core_dumps.sh couchdb
                     couch_dbdump escript couch_dbinfo genbrk
cbepctl
                                                          sigar_port
cbhealthchecker
                                                           sqlite3
cbrecovery
                        couchjs
                                          gencfu
                                                           to_erl
                       couch_viewgen
                                                            tools
cbreset_password
                                          gencnval
cbrestore
                        curl
                                                            typer
                                           genctd
                        curl-config
cbstats
                                           generate_cert
                                                            uconv
cbtransfer
                        derb
                                           genrb
                                                            vbmap
cbvbucketctl
                        dialyzer
                                           icu-config
```

## 1.5 More Resources

http://www.couchbase.com/#usecases

https://www.digitalocean.com/community/tutorials/how-to-install-couchbase-from-source-with-git-and-make-o License: Code is licensed under MIT License.

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 $Git Hub: \ https://github.com/dennyzhang/cheatsheet.dennyzhang.com/tree/master/cheatsheet-couchbase-A4$