# MIGRATION TOOL for Rubrik + Cloudian buckets v1.3.3b

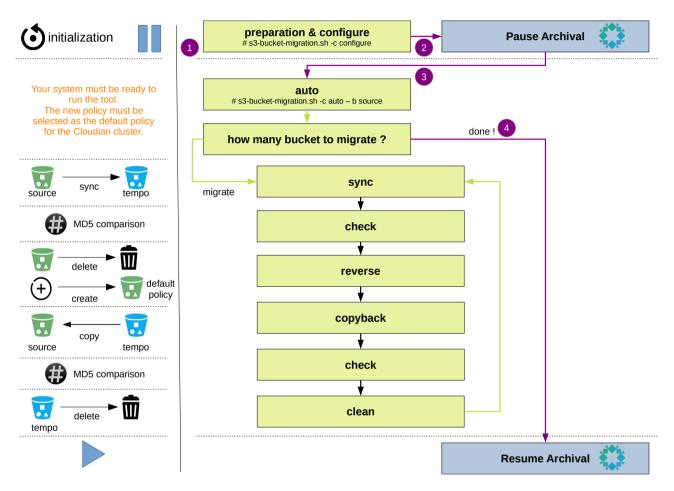
# **Disclaimer / Warning**

Use this tool with precautions (review the config file created manually for a double-check) for your environment: it is NOT an official tool supported by Cloudian.

Cloudian can NOT be involved for any bugs or misconfiguration due to this tool. So you are using it at your own risks and be aware of the restrictions.

#### 1 Flowchart of the migration

Due to the s3 compatibility, we can't rename a name of a bucket easily. This tool is provided as it is and is able to migrate a list of buckets with the same ArchivalLocation. The script "s3-bucket-migration.sh" follows the flowchart below:



In this flowchart, the source bucket is always migrated to another bucket with a suffix "-tempo" (meaning temporary bucket). For example, the migration of the bucket "vm-bronze-rubrik-0" will use a second bucket "vm-bronze-rubrik-0-tempo" for the migration.

Based on the statement above, you must check and double-check the free capacity of your Cloudian cluster and the capacity you will need to migrate a bucket or a couple of buckets.

Notice that at a moment, we have to delete the source bucket in order to re-create it with the full advantages of the new storage policy.

The tool will continue automatically if there is no error detected during the migration else it's a full stop for the rest of the migration. In this case, you have to review the logs, to resolve the error and to use the tool with the step-by-step process (or to re-run a full migration if possible).

#### 2 Installation

You have to download and install several files:

- the tool/script : s3-bucket-migration.sh
- the python "packages": s3cmd & s4cmd

Proceed to the package installations – depending on your Operating System – or by using the python tool "pip3" (or pip) :

```
root@snoopy:~# pip3 install s3cmd
Collecting s3cmd
 Downloading s3cmd-2.1.0-py2.py3-none-any.whl (145 kB)
                             145 kB 8.9 MB/s
Requirement already satisfied: python-dateutil in /usr/lib/python3/dist-packages (from s3cmd) (2.7.3)
Requirement already satisfied: python-magic in /usr/lib/python3/dist-packages (from s3cmd) (0.4.16)
Installing collected packages: s3cmd
Successfully installed s3cmd-2.1.0
root@snoopy:~#
root@snoopy:~#
root@snoopy:~# pip3 install s4cmd
Collecting s4cmd
 Downloading s4cmd-2.1.0.tar.gz (27 kB)
Requirement already satisfied: boto3>=1.3.1 in /usr/lib/python3/dist-packages (from s4cmd) (1.9.253)
Requirement already satisfied: pytz>=2016.4 in /usr/lib/python3/dist-packages (from s4cmd) (2019.3)
Building wheels for collected packages: s4cmd
 Building wheel for s4cmd (setup.py) ... done
 Created wheel for s4cmd: filename=s4cmd-2.1.0-py3-none-any.whl size=46575
sha256=3de1b3b51df8c055aba5a7465a134187e0419f9cec52be96340090abf6ad7686
 Stored in directory: /root/.cache/pip/wheels/a6/5b/b1/ec0b40be095faaf0147e66cb459af8c5adc61ad8d7d4cbe935
Successfully built s4cmd
Installing collected packages: s4cmd
Successfully installed s4cmd-2.1.0
root@snoopy:~#
```

For this documentation, I will use my Debian packages :

```
plong@snoopy:~$ s3cmd --version
s3cmd version 2.1.0
plong@snoopy:~$ s4cmd --version
s4cmd version 2.1.0
```

The command-line s3cmd and s4cmd should be available in : /usr/bin

```
plong@snoopy:~$ which s3cmd
/usr/bin/s3cmd
plong@snoopy:~$ which s4cmd
/usr/bin/s4cmd
```

### 3 Configuration

Then, run the tool to configure and initialize the s3 access:

→ the answers provided in the example below must be adjusted with your environment.

```
plong@snoopy:$ ./s3-bucket-migration.sh -c configure
Use this tool with precautions (review the config file created manually for a double-check) for your environment in it is NOT an official tool supported by Cloudian.
Enter new values or accept defaults in brackets with Enter.
Refer to user manual for detailed description of all options.
Access key and Secret key are your identifiers for Amazon S3. Leave them empty for using the env variables.
Access Key: 590bf0fbeac8ca20fbc5
Secret Key: 25D88mu1gIDP7fzvdbgpmbseoCQp/bU2ciB/ZDUd
Default Region [US]: cloudlab
Use "s3.amazonaws.com" for S3 Endpoint and not modify it to the target Amazon S3.
S3 Endpoint [s3.amazonaws.com]: s3-cloudlab.demo.lab
Use "%(bucket)s.s3.amazonaws.com" to the target Amazon S3. "%(bucket)s" and "%(location)s" vars can be used
if the target S3 system supports dns based buckets.
DNS-style bucket+hostname:port template for accessing a bucket [%(bucket)s.s3.amazonaws.com]: %(bucket)s.s3-
cloudlab.demo.lab
Encryption password is used to protect your files from reading
by unauthorized persons while in transfer to S3
Encryption password:
Path to GPG program [/usr/bin/gpg]:
When using secure HTTPS protocol all communication with Amazon S3
servers is protected from 3rd party eavesdropping. This method is
slower than plain HTTP, and can only be proxied with Python 2.7 or newer
Use HTTPS protocol [Yes]: no
On some networks all internet access must go through a HTTP proxy.
Try setting it here if you can't connect to S3 directly
HTTP Proxy server name:
New settings:
 Access Key: 590bf0fbeac8ca20fbc5
  Secret Key: 25D88mu1gIDP7fzvdbgpmbseoCQp/bU2ciB/ZDUd
  Default Region: cloudlab
  S3 Endpoint: s3-cloudlab.demo.lab
  DNS-style bucket+hostname:port template for accessing a bucket: %(bucket)s.s3-cloudlab.demo.lab
  Encryption password:
  Path to GPG program: /usr/bin/gpg
  Use HTTPS protocol: False
  HTTP Proxy server name:
  HTTP Proxy server port: 0
Test access with supplied credentials? [Y/n] y
Please wait, attempting to list all buckets...
Success. Your access key and secret key worked fine :-)
Now verifying that encryption works...
Not configured. Never mind.
Save settings? [y/N] y
Configuration saved to 's3cfg.conf'
Please provide the @IP or name of the Cloudian puppet master : cloudlab01
Adding config into : s3cfg.conf
PING cloudlab01 (192.168.110.201) 56(84) bytes of data.
64 bytes from cloudlab01 (192.168.110.201): icmp_seq=1 ttl=64 time=0.536 ms
--- cloudlab01 ping statistics ---
```

```
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.536/0.536/0.036/0.000 ms
The authenticity of host 'cloudlab01 (192.168.110.201)' can't be established.
ECDSA key fingerprint is SHA256:GndvX4wgQsAUXvAJJsf993PrewPsGJcbKgRNphDaBd4.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new
keys
root@cloudlab01's password: ********

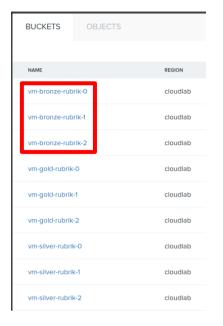
Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'root@cloudlab01'"
and check to make sure that only the key(s) you wanted were added.

Please provide the Sysadmin password for Admin API connection: public
Configuration done.

You can now continue for the automatic migration for multi-buckets with the command:
./s3-bucket-migration.sh -c auto -b <bucketname>
```

## 4 Full example

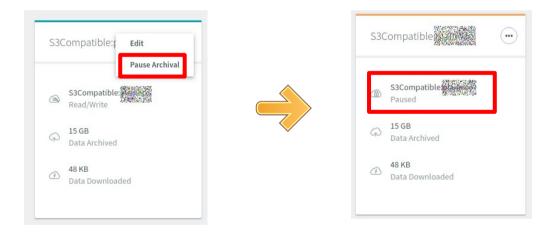


Here is the listing of the Rubrik buckets to migrate.

For the first migration, we are going to migrate the "vm-bronze" SLA composed of 3 buckets :

- vm-bronze-rubrik-0
- vm-bronze-rubrik-1
- vm-bronze-rubrik-2

Then, you have to go to the Rubrik GUI and force the "Pause Archival" mode on the ArchivalLocation before running the tool (avoid upload of new objects during the full sync.):

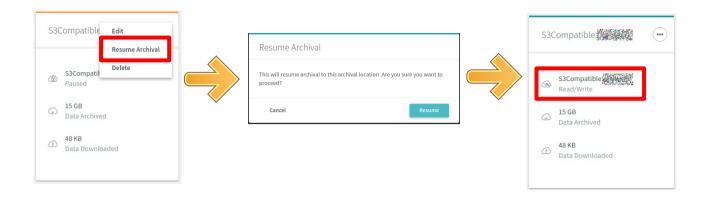


Next, check on the Cloudian cluster that the default storage policy is the new policy chosen for the new buckets which will be created during the migration.

```
plong@snoopy:~$ ./s3-bucket-migration.sh -c auto -b vm-bronze-rubrik-0
 Discrimer / Warning
Use this tool with precautions (review the config file created manually for a double-check) for your environment
it is NOT an official tool supported by Cloudian.
Cloudian can NOT be involved for any bugs or misconfiguration due to this tool. So you are using it at your own
risks and be aware of the restrictions.
 - We will plan to migrate this : -
  --> vm-bronze-rubrik-0
  --> vm-bronze-rubrik-1
--> vm-bronze-rubrik-2
 - End of listing -
 - Checking MPU size for all the buckets ... -
vm-bronze-rubrik-0 --> Biggest object SIZE is : 15 which is smaller than the max size MPU x PART: 167772160000 vm-bronze-rubrik-1 --> Biggest object SIZE is : 10965988 which is smaller than the max size MPU x PART: 167772160000
 vm-bronze-rubrik-2 --> Biggest object SIZE is : 15 which is smaller than the max size MPU x PART: 167772160000
 ...looks good
Do you want to continue (type : yes to continue, or anything else to abort) ? yes
OK, let's Go !
Checking the source bucket: vm-bronze-rubrik-0 - s3://vm-bronze-rubrik-0/ (bucket): => Bucket vm-bronze-rubrik-0/
                vm-bronze-rubrik-0
                                                 is available and readable. Continuing ...
Creation of a temporary bucket to migrate firstly the data ...: vm-bronze-rubrik-0-tempo Bucket vm-bronze-rubrik-0-tempo is now available. Continuing ...
--- Synchronization from the bucket vm-bronze-rubrik-0 to the bucket vm-bronze-rubrik-0-
                                                                           rubrik-0 to the bucket vm-bronze-rubrik-0-tempo : ---
Checking for big files and MPU size compatibility ...
Sync is finished.
Next step --> reverse command. ./s3-bucket-migration.sh -c reverse -b vm-bronze-rubrik-0
--- Check the content of the buckets ---
MD5 calculations for vm-bronze-rubrik-0 and vm-bronze-rubrik-0-tempo
This might take long time and might use a lot of ressources ... dependi
Done. All checksums are in the log file : vm-bronze-rubrik-0.log
                                                                                                     depending on the structure of the buckets
 Hashs are good, let's continue ...
       Reverse the operations from the bucket : vm-bronze-rubrik-0-tempo ---
Purging the bucket : vm-bronze-rubrik-0
Need to connect to the cluster by using SSH and root access...
Next step --> Copyback command. ./s3-bucket-migration.sh -c co
                                                    ./s3-bucket-migration.sh -c copyback -b vm-bronze-rubrik-0
      Copy-back from the bucket: vm-bronze-rubrik-0-tempo to the bucket: vm-bronze-rubrik-0 ---
Copy-back in progress ...
Size and number of objects for the buckets : vm-bronze-rubrik-0
                              1 objects s3://vm-bronze-rubrik-0/
1 objects s3://vm-bronze-rubrik-0-tempo/
Next step --> Clean-up command. ./s3-bucket-migration.sh -c clean -b vm-bronze-rubrik-0
--- Check the content of the buckets ---
MD5 calculations for vm-bronze-rubrik-0 and vm-bronze-rubrik-0-tempo
This might take long time and might use a lot of ressources ... depending on the structure of the buckets
Done. All checksums are in the log file: vm-bronze-rubrik-0.log
 Hashs are good, let's continue ...
--- Clean-up and deletion of non-necessary objects + bucket... ---
Purging the bucket: vm-bronze-rubrik-0-tempo
Need to connect to the cluster by using SSH and root access...
Bucket: vm-bronze-rubrik-0-tempo purged.
Waiting a couple of seconds to apply changes ...
Cleaning unnecessary log files
Cleaning unnecessary log files ...
--- Preparing to migrate the bucket : vm-bronze-rubrik-1 -- Checking the source bucket : vm-bronze-rubrik-1 s3://vm-bronze-rubrik-1/ (bucket):
                vm-bronze-rubrik-1 is available and readable. Continuing ...
Creation of a temporary bucket to migrate firstly the data ...: vm-bronze-rubrik-1-tempo
Bucket vm-bronze-rubrik-1-tempo is now available. Continuing ...
--- Synchronization from the bucket vm-bronze-rubrik-1 to the bucket vm-bronze-rubrik-1-tempo : ---
Checking for big files and MPU size compatibility ...
Size and number of objects for the buckets:
493518782 14 objects s3://vm-bronze-rubrik-1/
493518782 14 objects s3://vm-bronze-rubrik-1-tempo/
Next step --> reverse command. ./s3-bucket-migration.sh -c reverse -b vm-bronze-rubrik-1
```

```
--- Check the content of the buckets ---
MD5 calculations for vm-bronze-rubrik-1 and vm-bronze-rubrik-1-tempo
This might take long time and might use a lot of ressources ... depending on the structure of the buckets
Done. All checksums are in the log file : vm-bronze-rubrik-0.log
  Hashs are good, let's continue ...
                                  operations from the bucket : vm-bronze-rubrik-1-tempo ---
--- Reverse the operations from the bucket: vm-bronze-rubrik-1-tempo ---
Purging the bucket: vm-bronze-rubrik-1
Need to connect to the cluster by using SSH and root access...
Bucket: vm-bronze-rubrik-1 purged.
Waiting a couple of seconds to apply changes ...
Creating a new bucket: vm-bronze-rubrik-1
Delete is finished, if there is no error, please Go Forward ...
Next step --> Copyback command. ./s3-bucket-migration.sh -c copyback -b vm-bronze-rubrik-1
--- Copy-back from the bucket : vm-bronze-rubrik-1-tempo to the bucket : vm-bronze-rubrik-1 --- Copy-back in progress ...
Size and number of objects for the buckets : vm-bronze-rubrik-1
493518782 14 objects s3://vm-bronze-rubrik-1/
493518782 14 objects s3://vm-bronze-rubrik-1-tempo/
Next step --> Clean-up command. ./s3-bucket-migration.sh -c clean -b vm-bronze-rubrik-1
--- Check the content of the buckets ---
MD5 calculations for vm-bronze-rubrik-1 and vm-bronze-rubrik-1-tempo
This might take long time and might use a lot of ressources ... depending on the structure of the buckets
Done. All checksums are in the log file: vm-bronze-rubrik-0.log
  Hashs are good, let's continue ...
--- Clean-up and deletion of non-necessary objects + bucket... ---
Purging the bucket : vm-bronze-rubrik-1-tempo
Need to connect to the cluster by using SSH and root access...
Bucket: vm-bronze-rubrik-1-tempo purged.
Waiting a couple of seconds to apply changes ...
Cleaning unnecessary log files ...
Tab does
Job done
--- Preparing to migrate the bucket: vm-bronze-rubrik-2 ---
Checking the source bucket: vm-bronze-rubrik-2
s3://vm-bronze-rubrik-2/ (bucket):
=> Bucket vm-bronze-rubrik-2 is available and readable. Continuing ...
Creation of a temporary bucket to migrate firstly the data ...: vm-bronze-rubrik-2-tempo
Bucket vm-bronze-rubrik-2-tempo is now available. Continuing ...
--- Synchronization from the bucket vm-bronze-rubrik-2 to the bucket vm-bronze-rubrik-2-tempo : --
 Checking for big files and MPU size compatibility ...
Sync is finished.
Next step --> reverse command. ./s3-bucket-migration.sh -c reverse -b vm-bronze-rubrik-2
--- Check the content of the buckets ---
MD5 calculations for vm-bronze-rubrik-2 and vm-bronze-rubrik-2-tempo
This might take long time and might use a lot of ressources ... depending on the structure of the buckets
Done. All checksums are in the log file: vm-bronze-rubrik-0.log
  Hashs are good, let's continue ..
--- Reverse the operations from the bucket : vm-bronze-rubrik-2-tempo ---
Purging the bucket : vm-bronze-rubrik-2
Need to connect to the cluster by using SSH and root access...
Bucket: vm-bronze-rubrik-2 purged.
Waiting a couple of seconds to apply changes ...
Creating a new bucket : vm-bronze-rubrik-2
Delete is finished, if there is no error, please Go Forward ...
Next step --> Copyback command. ./s3-bucket-migration.sh -c copyback -b vm-bronze-rubrik-2
        Copy-back from the bucket: vm-bronze-rubrik-2-tempo to the bucket: vm-bronze-rubrik-2 ---
Copy-back in progress ..
"Size and number of objects for the buckets : vm-bronze-rubrik-2
15 1 objects s3://vm-bronze-rubrik-2/
15 1 objects s3://vm-bronze-rubrik-2-tempo/
Done.
Next step --> Clean-up command. ./s3-bucket-migration.sh -c clean -b vm-bronze-rubrik-2
        Check the content of the buckets
MD5 calculations for vm-bronze-rubrik-2 and vm-bronze-rubrik-2-tempo
This might take long time and might use a lot of ressources ... depending on the structure of the buckets
Done. All checksums are in the log file : vm-bronze-rubrik-0.log
  Hashs are good, let's continue ...
--- Clean-up and deletion of non-necessary objects + bucket... ---
Purging the bucket : vm-bronze-rubrik-2-tempo
Need to connect to the cluster by using SSH and root access...
Bucket: vm-bronze-rubrik-2-tempo purged.
Waiting a couple of seconds to apply changes ...
Cleaning unnecessary log files ...
Job done
Nothing else to do
Please resume the Archival Location matching the current migration
```

Last step, you have to resume the archival on the ArchivalLocation (Rubrik GUI):



#### 5 Logs

During the migration, the tool will log all the steps, all the copies and all the md5 hashs. For the migration of the buckets "vm-bronze-rubrik-0", there will be a file based with the bucketname with the extension ".log" like:

#### vm-bronze-rubrik-0.log

Example of logfile with a full migration of Rubrik buckets (customer environment):

```
Migration of migration2-rubrik-0 is starting ... --->>>
*** Preparation before SYNC ***
vendredi 10 avril 2020, 11:23:50 (UTC+0200)
Bucket 's3://migration2-rubrik-0-tempo/' cr
*** Sync in progress ***
3://migration2-rubrik-0/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051-2000_0_536870912000/407c8d61-6609-435b-8bd9-1d9d6419129e/4291cbbd-66ec-4d53-b9f5-2e496c68dcc6_3b1a7dca-6a2f-4133-b59e-6882a05b8b67/data.patch_metadata => s3://migration2-rubrik-0-tempo/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051-2000_0_536870912000/407c8d61-6609-435b-8bd9-1d9d6419129e/4291cbbd-66ec-4d53-b9f5-2e496c68dcc6_3b1a7dca-6a2f-4133-b59e-6862a05b8b67/data.patch_metadata
... s3://migration2-rubrik-0/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051-2000_0_536870912000/9e4bb77f-9d38-4fc0-8a75-acf091d2fc42/EMPTY_3c6a2639-814f-4c85-af38-08798396ee00/data.patch => s3://migration2-rubrik-0-tempo/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15
*** Get the content of the bucket migration2-rubrik-0-tempo ***
2020-04-10 09:23 748305104 s3://migration2-rubrik-0-tempo/blobstore/430/295/4c3a1b73-227a-4482-b758-
39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051-2000_0_536870912000/11e211de-ef96-4f9f-aee5-
093d41dbc141/bf934493-7f40-48e5-966d-0fd9ea736e7c_5c38413f-1310-4d09-b525-2ffadb3de7ce/data.patch
 2020-04-10 09:23 64 s3://migration2-rubrik-0-tempo/snappables/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/edaa2698-5734-47d0-9447-189fbe986416/index/filesystem.metadata__metadata
Size and number of objects for the buckets migration2-rubrik-0 30243013152 110 objects s3://migration2-rubrik-0/
 Size and number of objects for the bucket migration2-rubrik-0-tempo
 30243013152 110 objects s3://migration2-rubrik-0-tempo/
 *** MD5 calculations
 vendredi 10 avril 2020, 11:25:12 (UTC+0200)
2020-04-09 22:09 748305104 c9aa9f0550864f4d11a53e6b258ef7c3-45 s3://migration2-rubrik-0/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051-2000_0_536870912000/11e211de-ef96-4f9f-aee5-093d41dbc141/bf934493-7f40-48e5-966d-0fd9ea736e7c_5c38413f-1310-4d09-b525-2ffadb3de7ce/data.patch
                                                                                   edfb5ad7554a06be1778ff88a18600d8
 2020-04-06 11:43
                                                                       64
33://migration2-rubrik-0/snappables/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/edaa2698-5734-47d0-9447-189fbe986416/index/filesystem.metadata_metadata
 2020-04-10 09:23 748305104
                                                                                    c9aa9f0550864f4d11a53e6b258ef7c3-45
53://migration2-rubrik-0-tempo/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/2000_0_536870912000/11e211de-ef96-4f9f-aee5-093d41dbc141/bf934493-7f40-48e5-966d-0fd9ea736e7c_5c38413f-1310-4d09-b525-2ffadb3de7ce/data.patch
... 2020-04-10 09:23 64 edfb5ad7554a06be1778ff88a18600d8 s3://migration2-rubrik-0-tempo/snappables/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/edaa2698-5734-47d0-9447-189fbe986416/index/filesystem.metadata_metadata
 *** There is no error on #objects, bucket size and MD5 hashs ***
*** Reverse in progress for the bucket migration2-rubrik-0-tempo vendredi 10 avril 2020, 11:25:12 (UTC+0200)
Purging the bucket: migration2-rubrik-0
Bucket 's3://migration2-rubrik-0/' removed
Bucket 's3://migration2-rubrik-0/' created
 *** Copy-Back in progress from the bucket migration2-rubrik-0-tempo to the bucket migration2-rubrik-0 ***
*** Calculating objects and size ***
Size and number of objects for the bucket migration2-rubrik-0
30243013152 110 objects s3://migration2-rubrik-0/
 Size and number of objects for the bucket \tt migration2-rubrik-0-tempo\ 30243013152\ 110\ objects\ s3://migration2-rubrik-0-tempo/
s3://migration2-rubrik-0/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-
```

```
39 ff 4c9 ba 081 - vm - 15051 - 2000 \_ 0\_536870912000 / 11e211 de - ef96 - 4f9f - aee5 - 093 d41 dbc141 / bf934493 - 7f40 - 48e5 - 966 d-0fd9 ear 736e7c \_ 5c38413f - 1310 - 4d09 - b525 - 2ffadb3 de 7ce / data.patch
 ...
2020-04-10 09:25
 ...
2020-04-10 09:25 64 edfb5ad7554a06be1778ff88a18600d8
s3://migration2-rubrik-0/snappables/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/edaa2698-5734-47d0-9447-
  189fbe986416/index/filesystem.metadata__metadata
2020-04-10 09:23 748305104 c9aa9f0550864f4d11a53e6b258ef7c3-45 s3://migration2-rubrik-0-tempo/blobstore/430/295/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051/4c3a1b73-227a-4482-b758-39ff4c9ba081-vm-15051-2000_0_536870912000/11e211de-ef96-4f9f-aee5-093d41dbc141/bf934493-7f40-48e5-966d-0fd9ea736e7c_5c38413f-1310-4d09-b525-2ffadb3de7ce/data.patch
 2020-04-10 09:23
                                                                                       edfb5ad7554a06be1778ff88a18600d8
                                                                         64
09.23 04 10 09.23 04 edibadv/34000ed/10 09.23 04 edibadv/3
  *** There is no error on #objects, bucket size and MD5 hashs ***
                                                                                                                              migration2-rubrik-0-tempo ***
vendredi 10 avril 2020, 11:26:41 (UTC+0200)
Purging the bucket: migration2-rubrik-0-tempo
Bucket 's3://migration2-rubrik-0-tempo/' removed
 *** Preparation before SYNC ***
vendredi 10 avril 2020, 11:26:47 (UTC+0200)
 Bucket 's3://migration2-rubrik-1-tempo/' created
sylc in progress
s3://migration2-rubrik-1/rubrik_encryption_key_check.txt =>
s3://migration2-rubrik-1-tempo/rubrik_encryption_key_check.txt
s3://migration2-rubrik-1/rubrik_cluster_lock.txt => s3://migration2-rubrik-1-tempo/rubrik_cluster_lock.txt
2020-04-10 09:26 160 s3://migration2-rubrik-1-tempo/rubrik_eluster_lock.txt
2020-04-10 09:26 32 s3://migration2-rubrik-1-tempo/rubrik_encryption_key_check.txt
Size and number of objects for the buckets migration2-rubrik-1 192 2 objects s3://migration2-rubrik-1/
 Size and number of objects for the bucket migration2-rubrik-1-tempo
                            2 objects s3://migration2-rubrik-1-tempo/
*** MD5 calculations ***
vendredi 10 avril 2020, 11:26:50 (UTC+0200)
DUCKET migration2-rubrik-1 ------

2020-04-06 06:39 160 5a53822a26fff0efbebf6192d18e2679 s3://migration2-rubrik-1/rubrik_cluster_lock.txt
2020-04-06 06:39 32 cb35f88c7b4f32a6da001c22d18388cb
s3://migration2-rubrik-1/rubrik_encryption_key_check.txt
                                                       migration2
160
 2020-04-10 09:26
                                                                                        5a53822a26f1f0efbebf6192d18e2679
 33://migration2-rubrik-1-tempo/rubrik_cluster_lock.kxt
2020-04-10 09:26 32 cb35f88c7b4f32a6da001c22d18388cb
 s3://migration2-rubrik-1-tempo/rubrik_encryption_key_check.txt
 *** There is no error on #objects, bucket size and MD5 hashs ***
*** Reverse in progress for the bucket mig
vendredi 10 avril 2020, 11:26:51 (UTC+0200)
Purging the bucket : migration2-rubrik-1
Bucket 's3://migration2-rubrik-1/' removed
                                                                                                                          migration2-rubrik-1-tempo ***
 Bucket 's3://migration2-rubrik-1/' created
*** Copy-Back in progress from the bucket migration2-rubrik-1-te vendredi 10 avril 2020, 11:26:56 (UTC+0200)
s3://migration2-rubrik-1-tempo/rubrik_encryption_key_check.txt =>
s3://migration2-rubrik-1-tempo/rubrik_encryption_key_check.txt => s3://migration2-rubrik-1-tempo/rubrik_eluster_lock.txt => s3://migration2-rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubrik-1-tempo/rubri
                                                                                                                                  migration2-rubrik-1-tempo to the bucket migration2-rubrik-1 ***
 s3://migration2-rubrik-1-tempo/rubrik_cluster_lock.txt => s3://migration2-rubrik-1/rubrik_cluster_lock.txt
 *** Calculating objects and size ***
Size and number of objects for the bucket
                                                                                                                                  migration2-rubrik-1
192
                           2 objects s3://migration2-rubrik-1/
Size and number of objects for the bucket migration2-rubrik-1-tempo 192 2 objects s3://migration2-rubrik-1-tempo/
vendredi 10 avril 2020, 11:26:59 (UTC+0200)
                                                        160
 2020-04-10 09:26
2020-04-10 09:26
                                                                                  5af3822a26f1f0efbebf6192d18e2679 s3://migration2-rubrik-1/rubrik_cluster_lock.txt cb35f88c7b4f32a6da001c22d18388cb
                                                                         32
 s3://migration2-rubrik-1/rubrik_encryption_key_check.txt
                                                        migra
 2020-04-10 09:26
                                                                      160
                                                                                       5a53822a26f1f0efbebf6192d18e2679
33://migration2-rubrik-1-tempo/rubrik_cluster_lock.txt
2020-04-10 09:26 32 cb35f88c7b4f32a6da001c22d18388cb
 s3://migration2-rubrik-1-tempo/rubrik_encryption_key_check.txt
 *** There is no error on #objects, bucket size and MD5 hashs ***
*** Cleanup in progress from the bucket migratic vendredi 10 avril 2020, 11:26:59 (UTC+0200)
Purging the bucket : migration2-rubrik-1-tempo
Bucket 's3://migration2-rubrik-1-tempo/' removed
<<<--- *** Job done ***
                                                                                                                                  igration2-rubrik-1-tempo ***
```