Postgres-Backup

Backing up of stage Prod3 Postgres periodically.

We are doing regular backups to azure blob storage using the following script

Pre-flight checks

1. To authenticate with azure we should give azure environment variables in the script as shown below
1. Copy the key from azure UI by following this path
1. Install the Azure CLI on Linux

```
sudo rpm --import https://packages.microsoft.com/keys/microsoft.asc
```

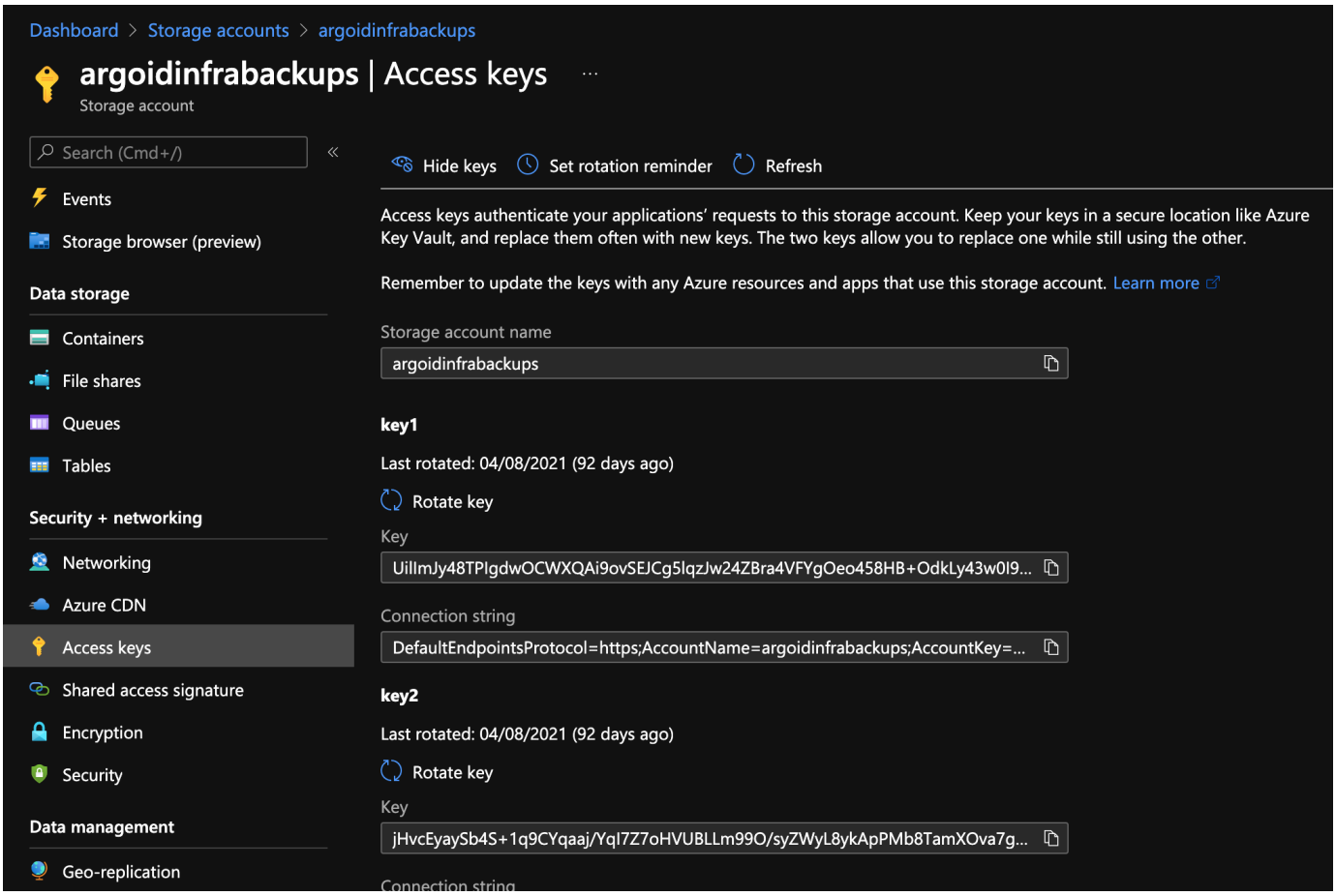
```
echo -e "[azure-cli]
name=Azure CLI
baseurl=https://packages.microsoft.com/yumrepos/azure-cli
enabled=1
gpgcheck=1
gpgkey=https://packages.microsoft.com/keys/microsoft.asc" | sudo tee
/etc/yum.repos.d/azure-cli.repo
```

```
sudo yum install azure-cli
```

To fetch the access keys.

To fetch the access keys we need to login to azure portal Storage accounts argoidinfrabackupstorage container.

Click on Access keys, we can view the access keys by clicking on show keys.



Home>argoidinfrabackupstorage >Access keys>Show keys

1. The key found in it must be stored in the

AZURE_STORAGE_KEY property

1. keep the environment variables in crontab as shown below

```
#SHELL=/bin/bash

##export azure properties
AZURE_STORAGE_KEY="DtaTVqgLGLEcT/x4
/FvOn8Bc7ygzg5KbGLCKE2j7ga4G82Y9qUtkZdEAhgcM0ORjR5rFgtdLUdzQ+AStM30EYQ==
"
AZURE_STORAGE_AUTH_MODE="key"
AZURE_STORAGE_ACCOUNT="argoidinfrabackupstorage"
AZURE_STORAGE_CONNECTION_STRING="DefaultEndpointsProtocol=https;
AccountName=argoidinfrabackupstorage;AccountKey=DtaTVqgLGLEcT/x4
/FvOn8Bc7ygzg5KbGLCKE2j7ga4G82Y9qUtkZdEAhgcM0ORjR5rFgtdLUdzQ+AStM30EYQ==
;EndpointSuffix=core.windows.net"
```

Step1:-Scripts to backup

Placed the scripts in /opt/postgres_backup_scripts/postgres_backup.sh in stage Prod3 instance 10.1.0.5 VM

Here wee are backing up the database `Config_Service_SaaS_Console_2_1_0` while logging in as a user postgres

```
#!/bin/bash
#created by vasu
##created on 2021-09-06 ist

date=$(date '+%Y-%m-%d_%H:%M:%S')
pg_dump_backup_dir=/opt/postgres_backup/pg_dump/pg_dump_$date.sql
postgres_container=postgres-backup
azure_backup=/opt/postgres_backup/
docker_container_postgres=debezium_postgres-12
logrotate_script=/opt/postgres_backup_scripts/logrotate_postgres.sh

##"Backup the postgres database"
docker exec $docker_container_postgres  pg_dump -U postgres
Config_Service_SaaS_Console_2_1_0 >> $pg_dump_backup_dir

## "azure syncing with azure blob"
az storage azcopy blob sync --container $postgres_container  -s
$azure_backup

## "calling the log rotation script"
bash "$logrotate_script"
```

Step2:-Logrotation script

Also configured log rotation script and calling the script at the end

```
#!/bin/bash
##created by vasu
##created on 28-05-2021
#filepath=<path>
delfilepath=/opt/postgres_backup/
#deldirpath=<path>

#To delete the .sql files older than 5 days
find $delfilepath -mtime +5 -type f -delete
```

The backups will be copied into the azure blobs(argoind-infra-backups)

Step3:-New instance restoration

we have to install the postgres by using the following documentation in new instance

PostgreSQL Installation

Step4:-Download the backups

we can download the backups from Home>Storage accounts>argoidinfrabackupstorage>

Step5:-Postgres data upgradation

Go to the latest file and download the Postgres database and data
we can use the following command to restore the Postgres data

First, we should clear the Postgres database using the following commands

```
DROP SCHEMA postgres CASCADE;
drop schema public cascade;
CREATE SCHEMA public;
```

then,

we need to copy the latest `pg_dump.sql` file into the docker container

```
sudo docker cp pg_dump.sql debezium_postgres-12:./
```

we should be care ful while executing this command sice It will dump all the backup data in the database `Config_Service_SaaS_Console_2_1_0` we can change the database name accordingly

```
sudo docker exec -it debezium_postgres-12 psql -U postgres -d
Config_Service_SaaS_Console_2_1_0 -f pg_dump.sql
```

Step6:-Restart the docker containers

We need to restart the docker containers

Step7:- Final checks

1. We need to check whether the data and schema is copied into the new Postgres
2. Check for the data sources