POSTGRESQL BACKREST 4 BACKUP & RESTORE

https://pgstef.github.io/2018/01/04/introduction_to_pgbackrest.html (Pgbackrest)
https://www.scaleway.com/en/docs/tutorials/backup-postgresql-pgbackrest-s3/ (Mine)
https://pgstef.github.io/2020/09/04/combining_pgbackrest_and_streaming_replication.html (Pg Replication)

Pgbackrest is a simple, reliable backup and restore system that can seamlessly scale up to the most extensive databases and workloads. pgBackRest implements all backup features internally and uses a custom protocol to communicate with remote systems. Removing reliance on tar and rsync allows better solutions to database-specific backup challenges. The custom remote protocol also allows more flexibility and limits the types of connections required to perform a backup, increasing security.

INSTALLATION

List the available repo in the yum: yum list available | grep pgbackrest OR yum install list module pgbackrest

Copy the info and paste it placing yum install in front: yum install pgbackrest.x86_64

Check that it's correctly installed: sudo -iu postgres pgbackrest

CONFIGURE PGBACKREST FOR BACKUP

By default, the configuration file is /etc/pgbackrest.conf. Let's make a copy:

sudo cp /etc/pgbackrest.conf /etc/pgbackrest.conf.bck

Then lest configure it. nano /etc/pgbackrest.conf EDIT THIS OUTPUT & PUT THE DIR U WANT

etc/pgbackrest.conf

Original content before editing	After editing to place my DIR
[global] repol-path=/var/lib/pgsql/11/backups log-level-console=info log-level-file=debug start-fast=y [my_stanza] pgl-path=/var/lib/pgsql/11/data	[global] repo1-path=/home/data/ (where ur backup is found) repo1-retention-full=1 repo1-retention-diff=1 process-max=2 log-level-console=info log-level-file=debug repo1-cipher-type=aes-256-cbc repo1-cipher-pass=vnp-1234 [payV2] pg1-path=/home/pg_data/pgdata15 (where pgdata is) pg1-port=1701 archive-copy=y

Create pgbackrest stanza: pgbackrest --stanza=payV2 stanza-create (must log into postgres to perform this)
The repo1-path is where your backup directory will be. Inside data u will see archive and backup DIR
Pg1-path is where your postgresql data file directory will be
my_stanza, here put the name of the db function u want so that when called upon the function name action will occur

CONFIGURE ARCHIVING IN postgresql.conf file. This is located in the postgresql data directory

In postgresql.conf look for these:

archive_mode = on

archive_command = 'test ! -f /home/data/archive/ %f && cp %p /home/data/archive/ %f && pgbackrest --stanza=payV2 archive-push %p' OR

archive_command = 'cp %p /home/data/archive/%f && pgbackrest --stanza=payV2 archive-push %p'

archive_command = 'pgbackrest --stanza=payV2 archive-push %p' BEST TO USE

systemctl restart postgresql.service

Ensure you create a directory for the backup and archive you used above and ensure you changed the ownership from root to postgres

Create backup & archive directory: (For DIR= mkdir /home/data/backup) (4 Arch= mkdir/home/data/archive)

Change their ownership from root to postgres: chown -R postgres:postgres /home/data

Give ownership permission: chmod –R 700 /home/data

Let's finally create the stanza and check the configuration:

sudo -iu postgres pgbackrest --stanza=payV2 stanza-create or login as superuser and run

pgbackrest --stanza=payV2 stanza-create

(@my_stanza replace it with the name u want there)

Perform backup

sudo -iu postgres pgbackrest --stanza=payV2 --type=full backup OR

sudo –iu postgres pgbackrest --stanza=payV2 backup

Once backup is initiated do not terminate it but use the backup info to know when it stops

Backup info: sudo -iu postgres pgbackrest info

Check the stanza configuration: sudo -iu postgres pgbackrest --stanza=payV2 check

Differential backup: pgbackrest --stanza=payV2 backup –delta for this to work full BK must occur first

RESTORE

Stop the services: systemctl stop postgresql-15.service

Log in to postgres: su – postres

Restore: pgbackrest --stanza=payV2 restore –delta

Restore: pgbackrest --stanza=payV2 restore Ensure to wipe the data directory before using this