

***** PITR in Postgresql *****

URL is :

<https://www.opsdash.com/blog/postgresql-wal-archiving-backup.html>
data directory is /var/lib/pgsql/data

```
1: su - postgres
2: mkdir /backup
3: mkdir /arc1
4: chown postgres:postgres -R /backup
5: chown postgres:postgres -R /arc1
6:
   *** edit postgresql.conf and update following parameters in it:

   wal_level=replica
   archive_mode=on
   archive_command= 'test ! -f /arc1%f && cp %p /arc1%f'

7: restart postgresql server
   cd /usr/pgsql-12/bin
   ./pg_ctl -D /var/lib/pgsql/12/data restart

8: su - postgres
9: psql -c "select pg_start_backup('label');" postgres
10: tar -C /var/lib/pgsql/12/data/ -czvf /backup/pg_basebackup_backup.tar.gz .

11: psql -c "select pg_stop_backup();" postgres
12: ls -l /arc    ### there will be a .backup file
13: cat filename.backup ## you can see the date and time of backup taken
14: psql
15: create database mydb;

##### recovery
16 : stop the postgres server.

17: remove the data directory to imagine it as a crash
rm -rf /var/lib/pgsql/12/data/

18: now initialize a new datadir
cd /usr/pgsql-12/bin
./initdb -D /var/lib/pgsql/12/data
and start the server
./pg_ctl -D /var/lib/pgsql/12/data start

19: extract the backup files on new datadir
tar -xvf /backup/pg_basebackup_backup.tar.gz -C /var/lib/pgsql/12/data/
20: create recovery.conf file with following command and check for permissions
also:

cd /var/lib/pgsql/12/data
touch recovery.signal
vi postgresql.conf
restore_command='cp /arc1/%f %p'
```

22: restart the postgres and you should get your mydb database again

```
CREATE TABLE data_to_recover(id int);
CREATE TABLE
=# INSERT INTO data_to_recover VALUES (generate_series(1, 100));
INSERT 0 100
=# SELECT pg_current_xlog_location();
```