Backup and Restore PostgreSQL Databases using Pg_dump

1. Backup Single Database

Enter the following command to create a backup file:

```
pg_dump my_database > my_database.sql
```

Replace **my_database** with the name of the database to be backed up.

- **Restore** a single database from backup in PostgreSQL. Just use "psql" command to restore PostgreSQL database.

```
psql my_database < my_database.sql
```

2. Backup All Databases

- **Backup** all databases in PostgreSQL using pg_dumpall utility.

```
pg_dumpall > alldbs.sql
```

- **Restore:** all database backup using following command.

```
psql  < alldbs.sql
```

3. Backup Single Table

- **Backup:** a single table named mytable from mydb database.

```
pg_dump -d mydb -t table_1 > mydb-table_1.sql
```

- **Restore:** single table backup to database. Make sure your backup file contains only single table backup which you want to restore.

```
psql mydb < mydb-table_1.sql
```

4. Compressed Backup

- **Backup** PostgreSQL database in compressed format. Use gzip command line utility to accept piped backup data and make archive file.

```
pg_dump  mydb | gzip  >  mydb.sql.gz
```

- **Restore** database from compressed backup file directly. Here gunzip will extract backup file and send data to psql command via pipe interface.

```
gunzip -c  mydb.sql.gz |  psql  mydb
```

5. Split Backup in Multiple Files and Restore

- **Backup:** PostgreSQL database and split backup in multiple files of specified size. It helps us to backup a large database and transfer to other host easily. As per below example it will split backup files of 100mb in size.

```
pg_dump   mydb | split -b  100m  –  mydb.pql
```

- **Restore:** database backup from multiple splited backup files.

```
cat  mydb.sql* |  psql   mydb
```

- **Backup:** database in compressed splited files of specified size.

```
pg_dump   mydb | gyzip | split -b  100m  –  mydb.sql.gz
```

- **Restore:** database from multiple files of compressed files.

```
cat  mydb.sql.gz* |  gunzip |  psql   mydb
```