PostgreSQL Notes - Pgbackrest

INSTALLATION TO IMPLEMENTATION

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PG_BACKREST

SERVER 2: (192.168.47.169) BACKUP SERVER

OS VERSION: RHEL LINUX 9.2

****

Note: create-stanza has to be run from PostgreSQL Server backup has to be run from Repository/Backup Server restore has to be run from PostgreSQL Server.

SERVER 1 : (192.168.47.168) PostgreSQL Server

1)Installation

A)PostgreSQL Software

B)pgbackrest software

2)PasswordLess

3)Prepare Configuration File

ENTRY (REFER LINE - 411)

4)create stanza to keep the backup

5)set the parameter

archive_command=push

restore_command=get

6)restore

SERVER 2 : (192.168.47.169) BACKUP SERVER

1)Installation

A)PostgreSQL Software

B)pgbackrest software

2)PasswordLess

3)Prepare Configuration File

ENTRY (REFER LINE - 422)

4)create directory to keep the backup

5)Backup

****

PREREQUISITES:

1.Yum repository must be installed

Remedies:

yum install -y https://download.postgresql.org/pub/repos/yum/reporpms/EL-9-x86_64/pgdg-redhat-repo-latest.noarch.rpm

[root@localhost package]# yum install -y https://download.postgresql.org/pub/repos/yum/reporpms/EL-9-x86_64/pgdg-redhat-repo-latest.noarch.rpm

Updating Subscription Management repositories.

Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Extra Packages for Enterprise Linux 9 - x86_64   2.0 MB/s | 21 MB   00:10

Extra Packages for Enterprise Linux 9 openh264 (From Cisco) - x86_64   589 B/s | 2.5 kB   00:04

Last metadata expiration check: 0:00:01 ago on Thursday 06 June 2024 04:37:12 PM.

pgdg-redhat-repo-latest.noarch.rpm   17 kB/s | 12 kB   00:00

Dependencies resolved.

===
==========
 Package   Architecture   Version   Repository   Size
===
==========
Installing:
 pgdg-redhat-repo   noarch   42.0-43PGDG   @commandline   12 k

Transaction Summary
===
==========
Install 1 Package

Total size: 12 k

Installed size: 15 k

Downloading Packages:

Running transaction check

Transaction check succeeded.

Running transaction test

Transaction test succeeded.

Running transaction

 Preparing   :   1/1

 Installing   : pgdg-redhat-repo-42.0-43PGDG.noarch   1/1

 Verifying   : pgdg-redhat-repo-42.0-43PGDG.noarch   1/1

Installed products updated.

Installed:

  pgdg-redhat-repo-42.0-43PGDG.noarch

2.epel package must be installed

yum install -y https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm

Remedies:

[root@localhost package]# yum install -y https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm

Updating Subscription Management repositories.

Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

epel-release-latest-9.noarch.rpm   10 kB/s | 19 kB   00:01

Dependencies resolved.

==

Package	Architecture	Version	Repository	Size

==

Installing:

 epel-release   noarch   9-7.el9   @commandline   19 k

Transaction Summary
==
===========
Install 1 Package

Total size: 19 k
Installed size: 26 k
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
 Preparing   :   1/1
 Installing   : epel-release-9-7.el9.noarch   1/1
 Running scriptlet: epel-release-9-7.el9.noarch   1/1
Many EPEL packages require the CodeReady Builder (CRB) repository.
It is recommended that you run /usr/bin/crb enable to enable the CRB repository.

 Verifying   : epel-release-9-7.el9.noarch   1/1
Installed products updated.

Installed:
 epel-release-9-7.el9.noarch

Complete!

STEP 1: Install pgbackrest

[root@localhost package]# yum install -y pgbackrest

Updating Subscription Management repositories.

Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Extra Packages for Enterprise Linux 9 - x86_64   3.4 MB/s | 21 MB   00:06

Extra Packages for Enterprise Linux 9 openh264 (From Cisco) - x86_64   814 B/s | 2.5 kB   00:03

Dependencies resolved.

==
===========

 Package   Architecture   Version   Repository   Size

==
===========

Installing:

 pgbackrest   x86_64   2.52-1PGDG.rhel9   pgdg-common   532 k

Installing dependencies:

 libssh2   x86_64   1.11.0-1.el9   epel   132 k

Transaction Summary

==
===========

Install 2 Packages

Total download size: 664 k

Installed size: 1.6 M

Downloading Packages:

[MIRROR] libssh2-1.11.0-1.el9.x86_64.rpm: Status code: 403 for http://mirror.sabay.com.kh/epel/9/Everything/x86_64/Packages/l/libssh2-1.11.0-1.el9.x86_64.rpm (IP: 118.67.201.33)

[MIRROR] libssh2-1.11.0-1.el9.x86_64.rpm: Curl error (60): SSL peer certificate or SSH remote key was not OK for https://mirror.sabay.com.kh/epel/9/Everything/x86_64/Packages/l/libssh2-1.11.0-1.el9.x86_64.rpm [SSL certificate problem: self-signed certificate in certificate chain]

[MIRROR] libssh2-1.11.0-1.el9.x86_64.rpm: Status code: 403 for http://mirror.freedif.org/fedora/epel/9/Everything/x86_64/Packages/l/libssh2-1.11.0-1.el9.x86_64.rpm (IP: 66.96.199.63)

[MIRROR] libssh2-1.11.0-1.el9.x86_64.rpm: Curl error (60): SSL peer certificate or SSH remote key was not OK for https://mirror.freedif.org/fedora/epel/9/Everything/x86_64/Packages/l/libssh2-1.11.0-1.el9.x86_64.rpm [SSL certificate problem: self-signed certificate in certificate chain]

[MIRROR] libssh2-1.11.0-1.el9.x86_64.rpm: Status code: 403 for http://linux.domainesia.com/fedora/fedora-epel/9/Everything/x86_64/Packages/l/libssh2-1.11.0-1.el9.x86_64.rpm (IP: 103.147.154.199)

(1/2): pgbackrest-2.52-1PGDG.rhel9.x86_64.rpm   429 kB/s | 532 kB   00:01

(2/2): libssh2-1.11.0-1.el9.x86_64.rpm   81 kB/s | 132 kB   00:01

Total   255 kB/s | 664 kB   00:02

Extra Packages for Enterprise Linux 9 - x86_64   939 kB/s | 1.6 kB   00:00

Importing GPG key 0x3228467C:

 Userid   : "Fedora (epel9) <epel@fedoraproject.org>"

 Fingerprint: FF8A D134 4597 106E CE81 3B91 8A38 72BF 3228 467C

 From   : /etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-9

Key imported successfully

PostgreSQL common RPMs for RHEL / Rocky / AlmaLinux 9 - x86_64   2.0 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

 Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

 Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

 From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

Key imported successfully

Running transaction check

Transaction check succeeded.

Running transaction test

Transaction test succeeded.

Running transaction

 Preparing   :   1/1

 Installing   : libssh2-1.11.0-1.el9.x86_64   1/2

 Running scriptlet: pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

 Installing   : pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

 Running scriptlet: pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

Verifying   : libssh2-1.11.0-1.el9.x86_64   1/2

 Verifying   : pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

Installed products updated.

Installed:

 libssh2-1.11.0-1.el9.x86_64   pgbackrest-2.52-1PGDG.rhel9.x86_64

Complete!

[root@localhost package]# yum list installed |grep pgbackrest

pgbackrest.x86_64   2.52-1PGDG.rhel9   @pgdg-common

<mark>SERVER 2 : (192.168.47.169) BACKUP SERVER</mark>

[root@localhost package]# yum install -y pgbackrest

Updating Subscription Management repositories.

Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

PostgreSQL common RPMs for RHEL / Rocky / AlmaLinux 9 - x86_64   342 B/s | 659 B   00:01

PostgreSQL common RPMs for RHEL / Rocky / AlmaLinux 9 - x86_64   2.0 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

 Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

 Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

 From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

PostgreSQL common RPMs for RHEL / Rocky / AlmaLinux 9 - x86_64   87 kB/s | 352 kB   00:04

PostgreSQL 16 for RHEL / Rocky / AlmaLinux 9 - x86_64   518 B/s | 659 B   00:01

PostgreSQL 16 for RHEL / Rocky / AlmaLinux 9 - x86_64   2.4 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

 Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

PostgreSQL 16 for RHEL / Rocky / AlmaLinux 9 - x86_64   83 kB/s | 309 kB   00:03

PostgreSQL 15 for RHEL / Rocky / AlmaLinux 9 - x86_64   440 B/s | 659 B   00:01

PostgreSQL 15 for RHEL / Rocky / AlmaLinux 9 - x86_64   2.1 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

PostgreSQL 15 for RHEL / Rocky / AlmaLinux 9 - x86_64   111 kB/s | 535 kB   00:04

PostgreSQL 14 for RHEL / Rocky / AlmaLinux 9 - x86_64   293 B/s | 659 B   00:02

PostgreSQL 14 for RHEL / Rocky / AlmaLinux 9 - x86_64   1.7 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

PostgreSQL 14 for RHEL / Rocky / AlmaLinux 9 - x86_64   229 kB/s | 798 kB   00:03

PostgreSQL 13 for RHEL / Rocky / AlmaLinux 9 - x86_64   353 B/s | 659 B   00:01

PostgreSQL 13 for RHEL / Rocky / AlmaLinux 9 - x86_64   2.4 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

PostgreSQL 13 for RHEL / Rocky / AlmaLinux 9 - x86_64   227 kB/s | 755 kB   00:03

PostgreSQL 12 for RHEL / Rocky / AlmaLinux 9 - x86_64   456 B/s | 659 B   00:01

PostgreSQL 12 for RHEL / Rocky / AlmaLinux 9 - x86_64   2.4 MB/s | 2.4 kB   00:00

Importing GPG key 0x08B40D20:

Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

PostgreSQL 12 for RHEL / Rocky / AlmaLinux 9 - x86_64   192 kB/s | 694 kB   00:03

Last metadata expiration check: 0:00:01 ago on Thursday 06 June 2024 04:39:21 PM.

Dependencies resolved.

```
=========================================================================================================================
 Package              Architecture          Version                   Repository              Size
=========================================================================================================================
Installing:
 pgbackrest           x86_64                2.52-1PGDG.rhel9          pgdg-common             532 k
Installing dependencies:
 libssh2              x86_64                1.11.0-1.el9              epel                    132 k

Transaction Summary
=========================================================================================================================
Install  2 Packages

Total download size: 664 k
Installed size: 1.6 M
Downloading Packages:
(1/2): pgbackrest-2.52-1PGDG.rhel9.x86_64.rpm                                 241 kB/s | 532 kB    00:02
(2/2): libssh2-1.11.0-1.el9.x86_64.rpm                                         58 kB/s | 132 kB    00:02
-------------------------------------------------------------------------------------------------------------------------
Total                                                                        171 kB/s | 664 kB    00:03
Extra Packages for Enterprise Linux 9 - x86_64                               699 kB/s | 1.6 kB    00:00
Importing GPG key 0x3228467C:
 Userid    : "Fedora (epel9) <epel@fedoraproject.org>"
 Fingerprint: FF8A D134 4597 106E CE81 3B91 8A38 72BF 3228 467C
 From     : /etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-9
Key imported successfully
PostgreSQL common RPMs for RHEL / Rocky / AlmaLinux 9 - x86_64               2.1 MB/s | 2.4 kB    00:00
Importing GPG key 0x08B40D20:
```

Userid   : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"

Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20

From   : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL

Key imported successfully

Running transaction check

Transaction check succeeded.

Running transaction test

Transaction test succeeded.

Running transaction

 Preparing   :   1/1

 Installing   : libssh2-1.11.0-1.el9.x86_64   1/2

 Running scriptlet: pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

 Installing   : pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

 Running scriptlet: pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

 Verifying   : libssh2-1.11.0-1.el9.x86_64   1/2

 Verifying   : pgbackrest-2.52-1PGDG.rhel9.x86_64   2/2

Installed products updated.

Installed:

 libssh2-1.11.0-1.el9.x86_64   pgbackrest-2.52-1PGDG.rhel9.x86_64

Complete!

#Check the packageis installed

[root@localhost package]# yum list installed | grep pgbackrest

pgbackrest.x86_64   2.52-1PGDG.rhel9   @pgdg-common

STEP 2 : Password Less Access

```
[postgres@server1 ~]$ ssh-keygen -t rsa                                    (setup keygen)

Generating public/private rsa key pair.

Enter file in which to save the key (/var/lib/pgsql/.ssh/id_rsa):

Created directory '/var/lib/pgsql/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /var/lib/pgsql/.ssh/id_rsa

Your public key has been saved in /var/lib/pgsql/.ssh/id_rsa.pub

The key fingerprint is:

SHA256:jMUArtKe0vpfnyFt3GZ5CQoKTE3TEKv9nVoFS/UbMAI postgres@server1

The key's randomart image is:

+---[RSA 3072]----+
|   *=E.. +    |
|  + o.o o +   |
| . +  =  o   |
|+ +  = o  o  |
|. * . o S o .  |
|+ o o = = o .  |
|. + . + X = o   |
|o  . * = .   |
|..... . o     |
+----[SHA256]----+

[postgres@server1 ~]$ ssh-copy-id -i ~postgres/.ssh/id_rsa.pub postgres@192.168.47.169          (seting passwordless access with server 2)

/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/var/lib/pgsql/.ssh/id_rsa.pub"

The authenticity of host '192.168.47.169 (192.168.47.169)' can't be established.

ED25519 key fingerprint is SHA256:tp5D4rQKzjtKJRH1y+p5y6d+H1fv+OPo1WrjSB6p/3Q.

This key is not known by any other names

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
```

postgres@192.168.47.169's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'postgres@192.168.47.169'"

and check to make sure that only the key(s) you wanted were added.

[postgres@server1 ~]$ ssh 192.168.47.169   (checking access to server 2)

Register this system with Red Hat Insights: insights-client --register

Create an account or view all your systems at https://red.ht/insights-dashboard

Last login: Thu Jun 6 16:57:53 2024

[postgres@server2 ~]$ exit

logout

Connection to 192.168.47.169 closed.

SERVER 2 : (192.168.47.169) BACKUP SERVER

[postgres@server2 ~]$ ssh-keygen -t rsa

Generating public/private rsa key pair.

Enter file in which to save the key (/var/lib/pgsql/.ssh/id_rsa):

Created directory '/var/lib/pgsql/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /var/lib/pgsql/.ssh/id_rsa

Your public key has been saved in /var/lib/pgsql/.ssh/id_rsa.pub

The key fingerprint is:

SHA256:y0RVYuipEHjTlBLEKJbAw4oPoT3fVewFlAAK/qvka34 postgres@server2

The key's randomart image is:

+---[RSA 3072]----+

|= o=o+oo.=*+. |

```
|oBo.*.o .o+..   |
|=+o..+ ..+ .    |
|= o..  .+ .     |
| o o.o oS       |
| . .oo .        |
| . .  o         |
| o..E           |
| o=o            |
+----[SHA256]-----+
[postgres@server2 ~]$ ssh-copy-id -i ~postgres/.ssh/id_rsa.pub postgres@192.168.47.168
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/var/lib/pgsql/.ssh/id_rsa.pub"
The authenticity of host '192.168.47.168 (192.168.47.168)' can't be established.
ED25519 key fingerprint is SHA256:hDNgvchRGDFa9NmY06IHwrIP6i3MMPN6wHLNgYsteKA.
This key is not known by any other names
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
postgres@192.168.47.168's password:

Number of key(s) added: 1

Now try logging into the machine, with:   "ssh 'postgres@192.168.47.168'"
and check to make sure that only the key(s) you wanted were added.

[postgres@server2 ~]$ ssh 192.168.47.168
Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Thu Jun  6 16:57:32 2024
[postgres@server1 ~]$
[postgres@server1 ~]$
[postgres@server1 ~]$ whoami
```

postgres

[postgres@server1 ~]$ hostname -i

fe80::20c:29ff:fecb:336e%ens160 192.168.47.168

[postgres@server1 ~]$ exit

logout

Connection to 192.168.47.168 closed.

STEP 3: Prepare Configuration File

SERVER 1 : (192.168.47.168) PostgreSQL Server

vi /var/lib/pgsql/pg1s1.conf   (Default Filename : /etc/pgbackrest.conf)

[postgres@server1 ~]$ vi /var/lib/pgsql/pg1s1.conf   (pg1s1 is the stanza name of configuration file)

[global]

repo1-host=192.168.47.169   -- backup server IP Address

repo1-host-user=postgres   -- backup server OS username

repo1-path=/Postgres/backup/   -- backup server directory path where we wanted to keep the backup

repo1-retention-full=2   -- how many full backup wants to keep

[pg1s1]   -- stanza name (Logical name given PostgreSQL Instance for the below two entry - PGDATA,PGPRT)

pg1-path=/Postgres/data_dir/   -- PostgreSQL Instance Data Directory path

pg1-port=5432   -- PostgreSQL Instance Port Number

SERVER 2 : (192.168.47.169) BACKUP SERVER

vi /var/lib/pgsql/pg1s1.conf   (Default Filename : /etc/pgbackrest.conf)

[postgres@server2]$ vi /var/lib/pgsql/pg1s1.conf

[global]

repo1-path=/Postgres/backup/   -- backup server directory path where we wanted to keep the backup

repo1-retention-full=2   -- how many full backup wants to keep

[pg1s1]   -- stanza name (Logical name given PostgreSQL Instance for the below two entry - PGDATA,PGPRT)

pg1-host=192.168.47.168   -- PostgreSQL Server IP Address

pg1-host-user=postgres   -- PostgreSQL Server OS username

pg1-path=/Postgres/data_dir/ -- PostgreSQL Instance Data Directory path

pg1-port=5432   -- PostgreSQL Instance Port Number

Step 4: On PostgreSQL-Server-IP-192.168.47.168 - run the below command for stanza-create - as a OS user postgres From PostgreSQL but gets created on backupserver

[postgres@server1 ~]$ pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 stanza-create

Step 5: To Push/Later-To-Get WAL(archive) On PostgreSQL-Server-IP-192.168.56.11 - as a OS user postgres set the parameter archive_command - to push Archive WAL and restore_command to get archive WAL

[postgres@server1 ~]$ vi /Postgres/data_dir/postgresql.conf

##Below parameter restart the instance

archive_mode=on

##Below two parameter reload the instance

archive_command='pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 archive-push %p'

restore_command='pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 archive-get %f "%p"'

:wq!

%p $PGDATA/pg_wal/*

%f keep unique name while restore

STEP 4: create directory to keep the backup

[postgres@server2 Postgres]$ mkdir backup

[postgres@server2 Postgres]$ chown -R postgres:postgres /Postgres/backup/

[postgres@server2 Postgres]$ chmod -R 700 /Postgres/backup/

[postgres@server2 backup]$ pwd

/Postgres/backup   (BACKUP DIRECTORY)

#check the backup *****************

[postgres@server2 data_dir]$ pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 info
stanza: pg1s1
   status: error (no valid backups)
   cipher: none

   db (current)
      wal archive min/max (15): 000000010000000000000082/000000010000000000000082
[postgres@server2 data_dir]$

#take the backup ******************

[postgres@server2 data_dir]$ pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 backup
WARN: no prior backup exists, incr backup has been changed to full
[postgres@server2 data_dir]$ pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 info
stanza: pg1s1
   status: ok
   cipher: none

   db (current)
      wal archive min/max (15): 000000010000000000000082/000000010000000000000084

      full backup: 20240606-173617F
         timestamp start/stop: 2024-06-06 17:36:17+05:30 / 2024-06-06 17:37:53+05:30
         wal start/stop: 000000010000000000000084 / 000000010000000000000084
         database size: 2.6GB, database backup size: 2.6GB
         repo1: backup set size: 547.8MB, backup size: 547.8MB
[postgres@server2 data_dir]$ pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 backup

```
[postgres@server2 data_dir]$

[postgres@server2 data_dir]$

[postgres@server2 data_dir]$

[postgres@server2 data_dir]$ pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 backup

[postgres@server2 data_dir]$ cd /Postgres/backup/

[postgres@server2 backup]$ ll

total 0

drwxr-x---. 3 postgres postgres 19 Jun  6 17:23 archive

drwxr-x---. 3 postgres postgres 19 Jun  6 17:23 backup

[postgres@server2 backup]$ cd backup/

[postgres@server2 backup]$ ll

total 0

drwxr-x---. 6 postgres postgres 191 Jun  6 17:47 pg1s1

[postgres@server2 backup]$ cd pg1s1/

[postgres@server2 pg1s1]$ ll

total 8

drwxr-x---. 3 postgres postgres   72 Jun  6 17:37 20240606-173617F

drwxr-x---. 3 postgres postgres   72 Jun  6 17:40 20240606-173617F_20240606-174051I

drwxr-x---. 3 postgres postgres   72 Jun  6 17:47 20240606-173617F_20240606-174238I

drwxr-x---. 3 postgres postgres   18 Jun  6 17:37 backup.history

-rw-r-----. 1 postgres postgres 2628 Jun  6 17:47 backup.info

-rw-r-----. 1 postgres postgres 2628 Jun  6 17:47 backup.info.copy

lrwxrwxrwx. 1 postgres postgres   33 Jun  6 17:47 latest -> 20240606-173617F_20240606-174238I
```

Backup information logfile to see :

Default path/filename for logfile : /var/log/pgbackrest/pg1s1-backup.log

```
[root@server2 pg1s1]# cd /var/log/pgbackrest/

[root@server2 pgbackrest]# ll

total 12
```

-rw-r-----. 1 postgres postgres 5409 Jun 6 18:03 pg1s1-backup.log

-rw-r-----. 1 postgres postgres 1323 Jun 6 18:03 pg1s1-expire.log

[root@server2 pgbackrest]# cat pg1s1-backup.log

------------------PROCESS START------------------

2024-06-06 17:36:16.199 P00   INFO: backup command begin 2.52: --config=/var/lib/pgsql/pg1s1.conf --exec-id=60224-c8b2b272 --pg1-host=192.168.47.168 --pg1-host-user=postgres --pg1-path=/Postgres/data_dir/ --pg1-port=5432 --repo1-path=/Postgres/backup --repo1-retention-full=2 --stanza=pg1s1

2024-06-06 17:36:17.340 P00   WARN: no prior backup exists, incr backup has been changed to full

2024-06-06 17:36:17.341 P00   INFO: execute non-exclusive backup start: backup begins after the next regular checkpoint completes

2024-06-06 17:36:17.854 P00   INFO: backup start archive = 000000010000000000000084, lsn = 0/84000028

2024-06-06 17:36:17.854 P00   INFO: check archive for prior segment 000000010000000000000083

2024-06-06 17:37:53.668 P00   INFO: execute non-exclusive backup stop and wait for all WAL segments to archive

2024-06-06 17:37:53.872 P00   INFO: backup stop archive = 000000010000000000000084, lsn = 0/84000138

2024-06-06 17:37:53.877 P00   INFO: check archive for segment(s) 000000010000000000000084:000000010000000000000084

2024-06-06 17:37:54.588 P00   INFO: new backup label = 20240606-173617F

2024-06-06 17:37:54.615 P00   INFO: full backup size = 2.6GB, file total = 1303

2024-06-06 17:37:54.615 P00   INFO: backup command end: completed successfully (98419ms)

------------------PROCESS START------------------

2024-06-06 17:40:50.189 P00   INFO: backup command begin 2.52: --config=/var/lib/pgsql/pg1s1.conf --exec-id=60510-f9c3ad9d --pg1-host=192.168.47.168 --pg1-host-user=postgres --pg1-path=/Postgres/data_dir/ --pg1-port=5432 --repo1-path=/Postgres/backup --repo1-retention-full=2 --stanza=pg1s1

2024-06-06 17:40:51.347 P00   INFO: last backup label = 20240606-173617F, version = 2.52

2024-06-06 17:40:51.347 P00   INFO: execute non-exclusive backup start: backup begins after the next regular checkpoint completes

2024-06-06 17:40:51.859 P00   INFO: backup start archive = 000000010000000000000086, lsn = 0/86000028

2024-06-06 17:40:51.859 P00   INFO: check archive for prior segment 000000010000000000000085

2024-06-06 17:40:53.851 P00   INFO: execute non-exclusive backup stop and wait for all WAL segments to archive

2024-06-06 17:40:54.053 P00   INFO: backup stop archive = 000000010000000000000086, lsn = 0/86000100

2024-06-06 17:40:54.055 P00   INFO: check archive for segment(s) 000000010000000000000086:000000010000000000000086

2024-06-06 17:40:54.463 P00   INFO: new backup label = 20240606-173617F_20240606-174051I

2024-06-06 17:40:54.489 P00   INFO: incr backup size = 16KB, file total = 1303

2024-06-06 17:40:54.489 P00   INFO: backup command end: completed successfully (4303ms)

------------------PROCESS START------------------

2024-06-06 17:42:37.570 P00   INFO: backup command begin 2.52: --config=/var/lib/pgsql/pg1s1.conf --exec-id=60719-395f4347 --pg1-host=192.168.47.168 --pg1-host-user=postgres --pg1-path=/Postgres/data_dir/ --pg1-port=5432 --repo1-path=/Postgres/backup --repo1-retention-full=2 --stanza=pg1s1

2024-06-06 17:42:38.717 P00   INFO: last backup label = 20240606-173617F_20240606-174051I, version = 2.52

2024-06-06 17:42:38.717 P00   INFO: execute non-exclusive backup start: backup begins after the next regular checkpoint completes

2024-06-06 17:46:57.338 P00   INFO: backup start archive = 000000010000000000000088, lsn = 0/88000028

2024-06-06 17:46:57.338 P00   INFO: check archive for prior segment 000000010000000000000087

2024-06-06 17:47:00.113 P00   INFO: execute non-exclusive backup stop and wait for all WAL segments to archive

2024-06-06 17:47:00.318 P00   INFO: backup stop archive = 000000010000000000000088, lsn = 0/88000170

2024-06-06 17:47:00.320 P00   INFO: check archive for segment(s) 000000010000000000000088:000000010000000000000088

2024-06-06 17:47:01.045 P00   INFO: new backup label = 20240606-173617F_20240606-174238I

2024-06-06 17:47:01.076 P00   INFO: incr backup size = 23.8MB, file total = 1652

2024-06-06 17:47:01.076 P00   INFO: backup command end: completed successfully (263508ms)

------------------PROCESS START------------------

2024-06-06 18:01:40.595 P00   INFO: backup command begin 2.52: --config=/var/lib/pgsql/pg1s1.conf --exec-id=62243-f602d9bc --pg1-host=192.168.47.168 --pg1-host-user=postgres --pg1-path=/Postgres/data_dir/ --pg1-port=5432 --repo1-path=/Postgres/backup --repo1-retention-full=2 --stanza=pg1s1 --type=incr

2024-06-06 18:01:41.730 P00   INFO: last backup label = 20240606-173617F_20240606-174238I, version = 2.52

2024-06-06 18:01:41.730 P00   INFO: execute non-exclusive backup start: backup begins after the next regular checkpoint completes

2024-06-06 18:03:20.649 P00   INFO: backup start archive = 00000001000000000000008A, lsn = 0/8A000028

2024-06-06 18:03:20.649 P00   INFO: check archive for prior segment 000000010000000000000089

2024-06-06 18:03:22.400 P00   INFO: execute non-exclusive backup stop and wait for all WAL segments to archive

2024-06-06 18:03:22.602 P00   INFO: backup stop archive = 00000001000000000000008A, lsn = 0/8A000170

2024-06-06 18:03:22.606 P00   INFO: check archive for segment(s) 00000001000000000000008A:00000001000000000000008A

2024-06-06 18:03:23.322 P00   INFO: new backup label = 20240606-173617F_20240606-180141I

2024-06-06 18:03:23.368 P00   INFO: incr backup size = 7.5MB, file total = 1950

2024-06-06 18:03:23.368 P00   INFO: backup command end: completed successfully (102776ms)

pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 --type=full backup --log-level-console=detail   (FULL BACKUP)

pgbackrest --config=/var/lib/pgsql/pg1s1.conf --stanza=pg1s1 --type=incr backup   (INCREMENTAL BACKUP)