

PostgreSQL Notes - Pgbackrest

INSTALLATION TO IMPLEMENTATION

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PG_BACKREST

SERVER 1: (192.168.47.168) PostgreSQL Server

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/reporpm/EL-9-x86_64/pgdg-redhat-repo-latest.noarch.rpm
```

```
[root@localhost package]# yum install -y https://download.postgresql.org/pub/repos/yum/reporpm/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
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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

Preparing1/1

Installingpgdg-redhat-repo-42.0-43PGDG.noarch1/1

Verifyingpgdg-redhat-repo-42.0-43PGDG.noarch1/1

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.rpm10 kB/s | 19 kB00:01

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

SERVER 1 : (192.168.47.168) PostgreSQL Server

[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
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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_641/2

Verifying : pgbackrest-2.52-1PGDG.rhel9.x86_642/2

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_642.52-1PGDG.rhel9@pgdg-common

SERVER 2 : (192.168.47.169) BACKUP SERVER

[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_64342 B/s | 659 B00:01

PostgreSQL common RPMs for RHEL / Rocky / AlmaLinux 9 - x86_642.0 MB/s | 2.4 kB00:00

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_6487 kB/s | 352 kB00:04

PostgreSQL 16 for RHEL / Rocky / AlmaLinux 9 - x86_64518 B/s | 659 B00:01

PostgreSQL 16 for RHEL / Rocky / AlmaLinux 9 - x86_642.4 MB/s | 2.4 kB00:00

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
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Installing dependencies:

libssh2	x86_64	1.11.0-1.el9	epel	132 k
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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
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(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

SERVER 1 : (192.168.47.168) PostgreSQL Server

```
[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:y0RVYuiP EHJTIBLEKJbAw4oPoT3fVewFIAAK/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:hDNgvchRGDFa9NmY06IHwrlP6i3MMPN6wHLNgYsteKA.

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:feeb: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

SERVER 1 : (192.168.47.168) PostgreSQL Server

[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

SERVER 2 : (192.168.47.169) BACKUP SERVER

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): 0000000100000000000000082/0000000100000000000000082

```
[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): 0000000100000000000000082/0000000100000000000000084

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: 0000000100000000000000084 / 0000000100000000000000084

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 = 0000000100000000000000084, lsn = 0/84000028

2024-06-06 17:36:17.854 P00 INFO: check archive for prior segment 0000000100000000000000083

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 = 0000000100000000000000084, lsn = 0/84000138

2024-06-06 17:37:53.877 P00 INFO: check archive for segment(s) 0000000100000000000000084:0000000100000000000000084

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 = 0000000100000000000000086, lsn = 0/86000028

2024-06-06 17:40:51.859 P00 INFO: check archive for prior segment 0000000100000000000000085

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 = 0000000100000000000000086, lsn = 0/86000100

2024-06-06 17:40:54.055 P00 INFO: check archive for segment(s) 0000000100000000000000086:0000000100000000000000086

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 = 0000000100000000000000088, lsn = 0/88000028

2024-06-06 17:46:57.338 P00 INFO: check archive for prior segment 0000000100000000000000087

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 = 0000000100000000000000088, lsn = 0/88000170

2024-06-06 17:47:00.320 P00 INFO: check archive for segment(s) 0000000100000000000000088:0000000100000000000000088

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 = 000000010000000000000008A, lsn = 0/8A000028

2024-06-06 18:03:20.649 P00 INFO: check archive for prior segment 0000000100000000000000089

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 = 000000010000000000000008A, lsn = 0/8A000170

2024-06-06 18:03:22.606 P00 INFO: check archive for segment(s) 000000010000000000000008A:000000010000000000000008A

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)