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| |  | | --- | | BACKUP & REFRESH  **POS-DB-DOC-BACKUP procedure.docx** | |

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# Procedure Objective

## Purpose/Scope:

The Purpose of this document is to describe the (binary) backup procedures for PostgreSQL cluster in the SG environment.

# References

|  |  |
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| Ref. No | Document Title |

# Procedure steps

## Employment

This procecure describe the setup of a physical backup for a PostgreSQL cluster:

* The physical backup script $COM/pg\_backup.pl

All databases of the cluster are backuped

It is not not possible to do a single database backup

* The scheduling of a backup JOB using autosys

## Pre-requisites

The environment shoud be fully normalized (PostgreSQL installation from SGCloud or manual install using pg\_install.pl)

The PostgreSQL cluster to backup must be in archive mode

## Start a physical backup using pg\_backup.pl

|  |  |
| --- | --- |
| **Step** | **Description** |
| 1 | Connect on to the server were you want to operate using a ssh connection |
| 2 | Switch to **postgres** user (from your named DBA account)  sudo su – **postgres** |
| 3 | Check you have enough space to store the Cluster backup  The default backu location is /<SVC>/pgdump01. Warning: this directory is usually sharing the same FS as the database cluster files |
| 4 | Edit the program config file ($FIC/pg\_backup\_<CLUSTER\_NAME>.cfg) if you want to declare default backup values |
| 5 | Display the pg\_backup.pl usage  **$COM/pg\_backup.pl -h** |
| 6 | Backup actions:   * Create an online PostgreSQL backup of the Cluster * Optional purge of the archives ( before creating the backup) * Optional purge of the previous backups ( before creating the backup)   Ie: start a compressed backup for the current cluster  **$COM/pg\_backup.pl -c $CLUSTER\_NAME -Z** |
| 7 | Backup execution monitoring  The backup execution logs are located on $LOG  Each time a backup is executed, a new row is inserted into the TLOGBCKPG table of the cluster |

Declare an autosys backup job for a Postgresql Cluster

|  |  |
| --- | --- |
| **Step** | **Description** |
| 1 | Optionaly setup a backup config file to define the backup retention  (otherwise the scheduled job will use the default settings which can lead to a FS full) |
| 2 | Manually test the backup on the server  **Ie: $COM/pg\_backup.pl –c $CLUSTER\_NAME** |

|  |  |
| --- | --- |
| 3 | Create the autosys backup job from the S.T.A.R.T scheduling website  <https://start.fr.world.socgen> |
| 5 | Copy the postgres ssh key (postgres@**adbprdap003**:/home/postgres/.ssh/id\_rsa.pub) to the database server (postgres@<mydbserver>:/home/postgresql/.ssh/authorized\_keys)  Warning: while creating the authorized\_keys file on the database server, double check :   * /home/postgres is not writable for group and other * /home/postgres/.ssh is 700 * /home/postgres/.ssh/authorized\_keys is 600 |
| 6 | Backup job monitoring  All the PostgreSQL autosys jobs are submitted from **adbprdap003** (primary node) **& adbprdap004** (backup node) servers.  The agent summary execution logfiles are located in postgres:**$LOG** of these two servers  The detailed execution logs are located directly on the database servers (posrgres:**$LOG**)  Upon failure, a monitoring ticket is created and assigned to the GDI team  The autosys environment for Postgresql is **PE3**. You can submit autorep/sendevent commands from postgres@adbprdap003 / postgres@adbprdap004.    If you want to execute autosys commands from another server, you should source the autosys env script (. /opt/autosys113/autouser.PE3/autosys.bash.`hostname`) |