|  |
| --- |
| **PostgreSQL 15 : Streaming Replication**2022/12/08 |

|  |  |
| --- | --- |
|  | Configure PostgreSQL Streaming Replication. This configuration is common Primary/Replica settings. |
| [1] | [Install and start PostgreSQL Server on all Nodes, refer to here [1]](https://www.server-world.info/en/note?os=CentOS_Stream_9&p=postgresql15&f=1). |
| [2] | Configure Primary Host. |

|  |
| --- |
| **[root@www ~]#**  **[vi](https://www.server-world.info/en/command/html/vi.html) /var/lib/pgsql/data/postgresql.conf**  **# line 60 : uncomment and change**  **listen\_addresses = '**  **\***  **'**  **# line 205 : uncomment**  **wal\_level = replica**  **# line 210 : uncomment**  **synchronous\_commit = on**  **# line 291 : uncomment (max number of concurrent connections from streaming clients)**  **max\_wal\_senders = 10**  **# line 322 : uncomment and change**  **synchronous\_standby\_names = '**  **\***  **'**  **[root@www ~]#**  **[vi](https://www.server-world.info/en/command/html/vi.html) /var/lib/pgsql/data/pg\_hba.conf**  **# end line : comment out existing lines and all new lines # host replication [replication user] [allowed network] [authentication method] # if using SSL connection, specify [hostssl replication \*\*\*]**  **#host replication all 127.0.0.1/32 ident**  **#host replication all ::1/128 ident**  **host replication rep\_user 10.0.0.30/32 scram-sha-256**  **host replication rep\_user 10.0.0.51/32 scram-sha-256**  **# create a user for replication**  **[root@www ~]#**  **[su](https://www.server-world.info/en/command/html/su.html) - postgres**  **[postgres@www ~]$**  **createuser --replication -P rep\_user**  **Enter password for new role:**  **# set any password**  **Enter it again:**  **[postgres@www ~]$**  **exit**  **[root@www ~]#**  **[systemctl](https://www.server-world.info/en/command/html/systemctl.html) restart postgresql** |

|  |  |
| --- | --- |
| [3] | Configure Replica Host. |

|  |
| --- |
| **# stop PostgreSQL and remove existing data**  **[root@node01 ~]#**  **[systemctl](https://www.server-world.info/en/command/html/systemctl.html) stop postgresql**  **[root@node01 ~]#**  **[rm](https://www.server-world.info/en/command/html/rm.html) -rf /var/lib/pgsql/data/\***  **# get backup from Primary Host**  **[root@node01 ~]#**  **[su](https://www.server-world.info/en/command/html/su.html) - postgres**  **[postgres@node01 ~]$**  **pg\_basebackup -R -h www.srv.world -U rep\_user -D /var/lib/pgsql/data -P**  **Password:**  **# password of replication user**  **30685/30685 kB (100%), 1/1 tablespace [postgres@node01 ~]$**  **exit**  **[root@node01 ~]#**  **[vi](https://www.server-world.info/en/command/html/vi.html) /var/lib/pgsql/data/postgresql.conf**  **# line 60 : uncomment and change**  **listen\_addresses = '**  **\***  **'**  **# line 335 : uncomment**  **hot\_standby = on**  **[root@node01 ~]#**  **[systemctl](https://www.server-world.info/en/command/html/systemctl.html) start postgresql** |

|  |  |
| --- | --- |
| [4] | [If Firewalld is running](https://www.server-world.info/en/note?os=CentOS_Stream_9&p=firewalld&f=1), allow PostgreSQL service. |

|  |
| --- |
| **[root@www ~]#**  **firewall-cmd --add-service=postgresql**  **success [root@www ~]#**  **firewall-cmd --runtime-to-permanent**  **success** |

|  |  |
| --- | --- |
| [5] | That's OK if result of the command below on Primary Host is like follows. Verify it works normally to create databases or to insert data on Primary Host. |

|  |
| --- |
| **[postgres@www ~]$**  **psql -c "select usename, application\_name, client\_addr, state, sync\_priority, sync\_state from pg\_stat\_replication;"**  **usename | application\_name | client\_addr | state | sync\_priority | sync\_state**  **----------+------------------+-------------+-----------+---------------+------------**  **rep\_user | walreceiver | 10.0.0.51 | streaming | 1 | sync**  **(1 row)** |