

Replication Notes

Last updated by | Lisa Liu | Nov 6, 2020 at 10:35 AM PST

- Replica has to be equal or more than master server tier. Replica cannot be downgraded than master. Same with size
- No promotion to master is implemented as of now.
- Stop replication capability. When an active replication is stopped, the server becomes a standalone server on its own.
- Not high availability, but read scale out feature (since the replicas are in same region and read-only)
- Replica and master can be in separate VNets or not in VNets and all of this is supported.
- When replica is in a VNet, there should be VM in the VNet (with pgadmin) from which the data on replica can be accessed.
- Master/Replica can be moved between resource groups when replication is active and that will not have any effect on replication.
- Streaming or file shipping mode are being used in the backend. Streaming is used primarily (once replication is established) but in case it is broken, wal file shipping is used.

How it works internally -

PITR restore of SBS Backup is used to start the replication.

On the master server there is a user created called `azure_replication_user_*`. The same user is used for replication to multiple replicas. The following command will give us the username -

```
Select * from pg_roles
```

`RoReplication` column will show true value indicating replication

One slot per replica is created on the master server. This can be viewed in column `slot_name` by running -

```
Select * from pg_replication_slots
```

Active --> true means replication is active

`Pg_stat_replication` contains more statistics on the replication like `lsn`, `application_name` etc.

```
Select * from pg_stat_replication
```

`Application_name` is the name of the replica

How good have you found this content?

