Managing PostgreSQL on Cloud

Eren Basak
Engineer at Ubicloud

@aamederen

Formerly Microsoft, Citus Data

We'll have a few tips about…

- Provisioning

- Backups

- Availability

- Maintenance

Provisioning

Cloud = Virtual Resources (VMs, Disks, Storage, etc.)

Easy to tear down and recreate, do that!

Tip #1: Work with Frozen VM images => Less Bugs

Tip #2: Don't modify VM, replace it

Backups

Base backups + WAL shipping

Tip #3: Use managed disk snapshots if available, incremental backups otherwise

Tip #4: Use wal-g (i.e. don't use your own archive command script)

- Parallelism
- Pre-fetch
- Retry
- Encryption
- Compression

Availability

Have standbys ready to take control!

Tip #5: Have multiple source of pulses (check psql, wal upload)

Tip #6: Do drills regularly

Maintenance

OS updates, security patches, new PG & Extension versions

Tip #7: Regularly take new VM images and test them

Tip #8: Perform maintenance failovers regularly (once a month)

Bonus!

Tip #9: Practice point-in-time-recovery (PITR) regularly

DELETE FROM stuff # forgot WHERE column = 'something'

Tip #10: PITR is forking, good for testing

- PG upgrades
- Extension upgrades
- OS changes

Thank you

@aamederen

PGConf EU 2024