Greenplum Disaster Recovery

Greenplum DR

VMware Tanzu Greenplum Team 2024.10



Greenplum Disaster Recovery

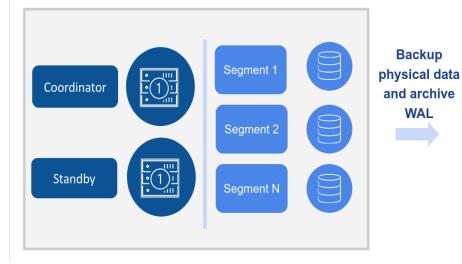
Overview

- Greenplum Disaster Recovery
 - Greenplum 6.27.1+: Full Recovery, Incremental Recovery

WAL

Greenplum 7.3.0+ : Full Recovery, Incremental Recovery, Continuous Recovery(DR 클러스터 조회 기능 지원)

Primary Cluster



Repository

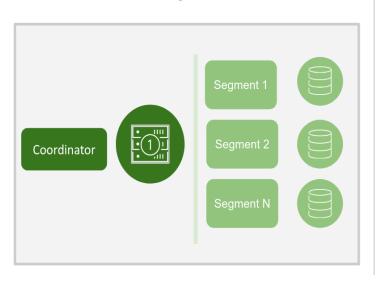


Restore

backups

and WAL

Recovery Cluster





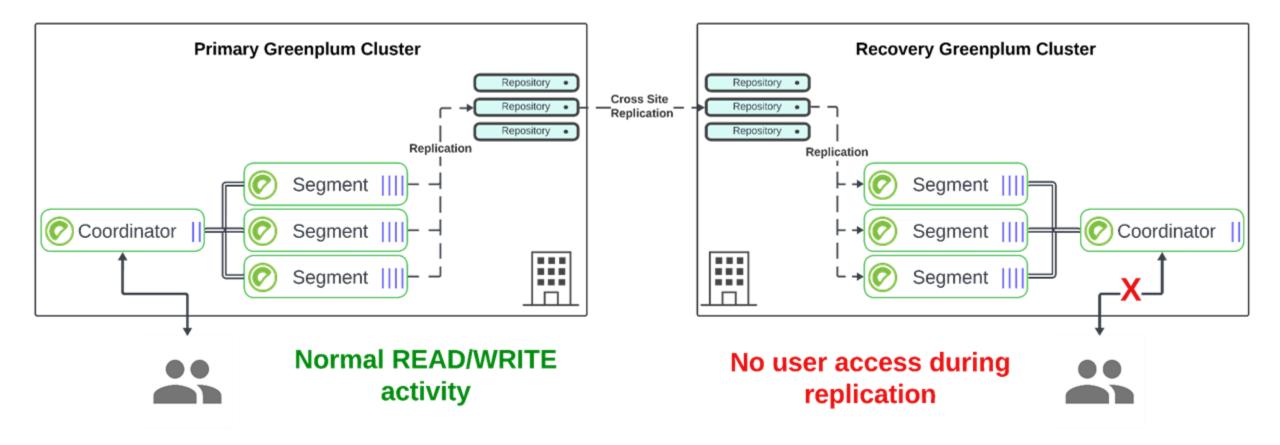
Greenplum Backup & Restore vs Disaster Recovery

	Greenplum Disaster Recovery (gpdr)	Greenplum Backup & Restore (gpbackup)
Primary / DR number of segments	same	can vary
Type of backup	Physical Based on files in data directories	Logical Uses COPY FROM/TO <tables></tables>
Impact on Primary cluster	Low Disk and n/w to move data	Medium - High compete for resources SQL locks
Incremental DR	✓	Partial - Append Only Incremental restore doesn't support schema changes (data-only)
Speed	Full Backup 75% faster. Full Restore 250% faster Subsequent restores are very fast	Slower due to database queries and DDL Subsequent restores are not fast as DR
Object filtering	No Full cluster is backed up and restore	√ Filter by database, schemas, tables
Availability while recovery	DR Cluster needs to be offline during restore	DR cluster can be Online during restore
Primary/DR GP Versions	Major version should match (either GP6 or GP7)	Works across major versions (GP 5/6/7)
Primary/DR Segment Count	Has to match	Can vary



Typical Architecture for Disaster Recovery

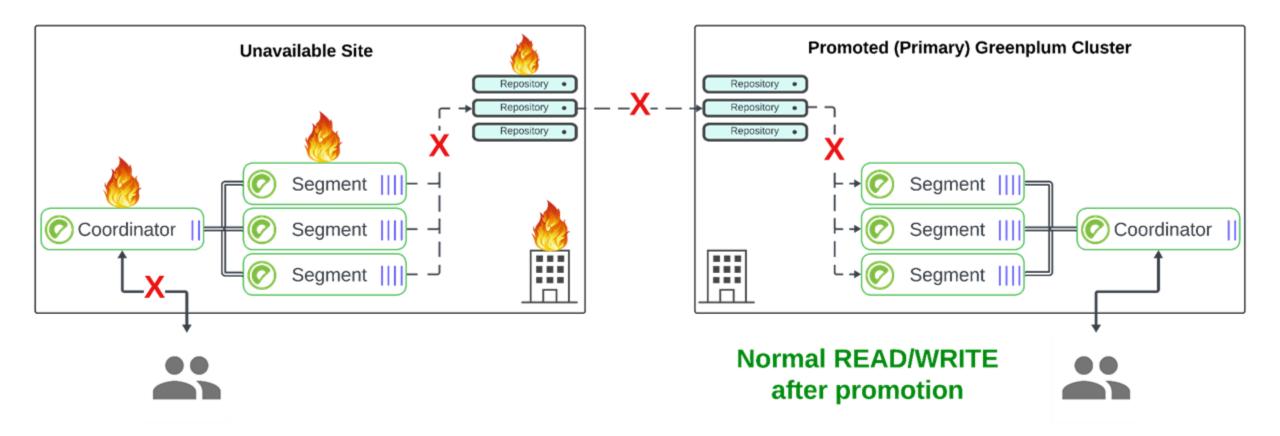
Greenplum Disaster Recovery (GPDR)





Typical Architecture for Disaster Recovery

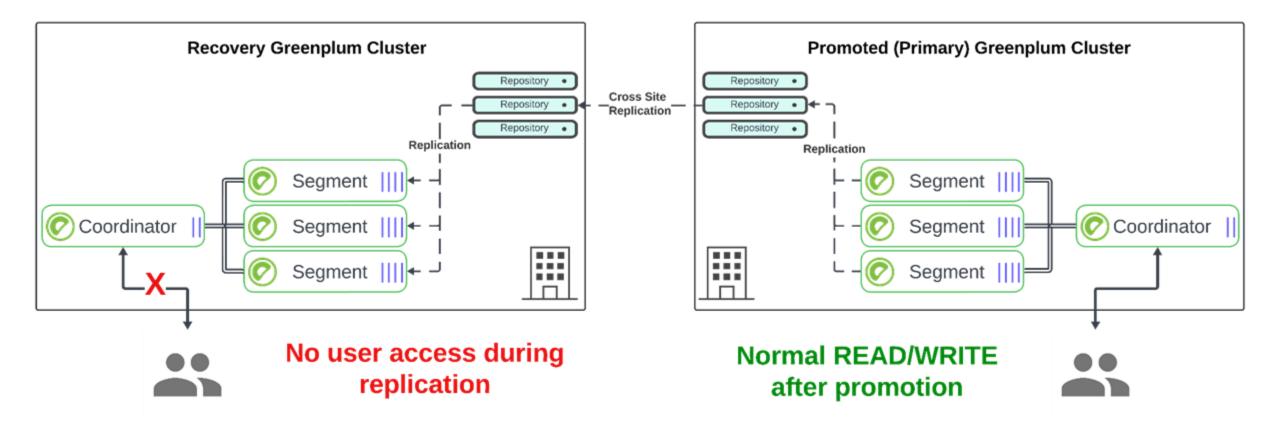
Promotion from a disaster





Typical Architecture for Disaster Recovery

Reverse Direction





Recovery Clusters as Read Replicas

Without promotion

