



Amp Up Your SQL Server databases on AWS with Clumio

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Agenda:

1. How do customers backup SQL Server on AWS today?
2. Challenges with SQL Server on AWS
3. Architectural overview of Clumio for SQL Server on EC2
4. Incremental forever backups
5. Point-in-time recovery
6. How Clumio helps Database Administrators and IT teams



How do customers backup SQL Server on AWS today?



SQL Server
Management
Studio backups



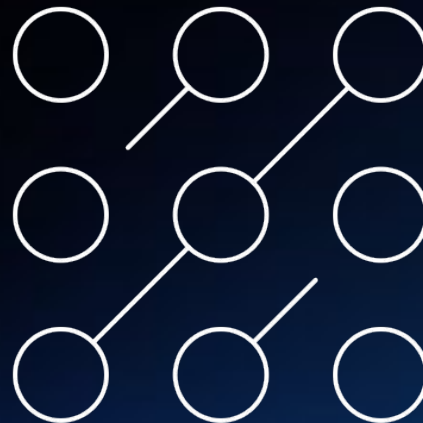
EBS Snapshots



3rd party tools

DBAs most common backup struggles:

- Availability expectations
- Rapid recovery
- Point-in-time recovery
- Databases' constant change
- Organizational backup standards that don't fit databases

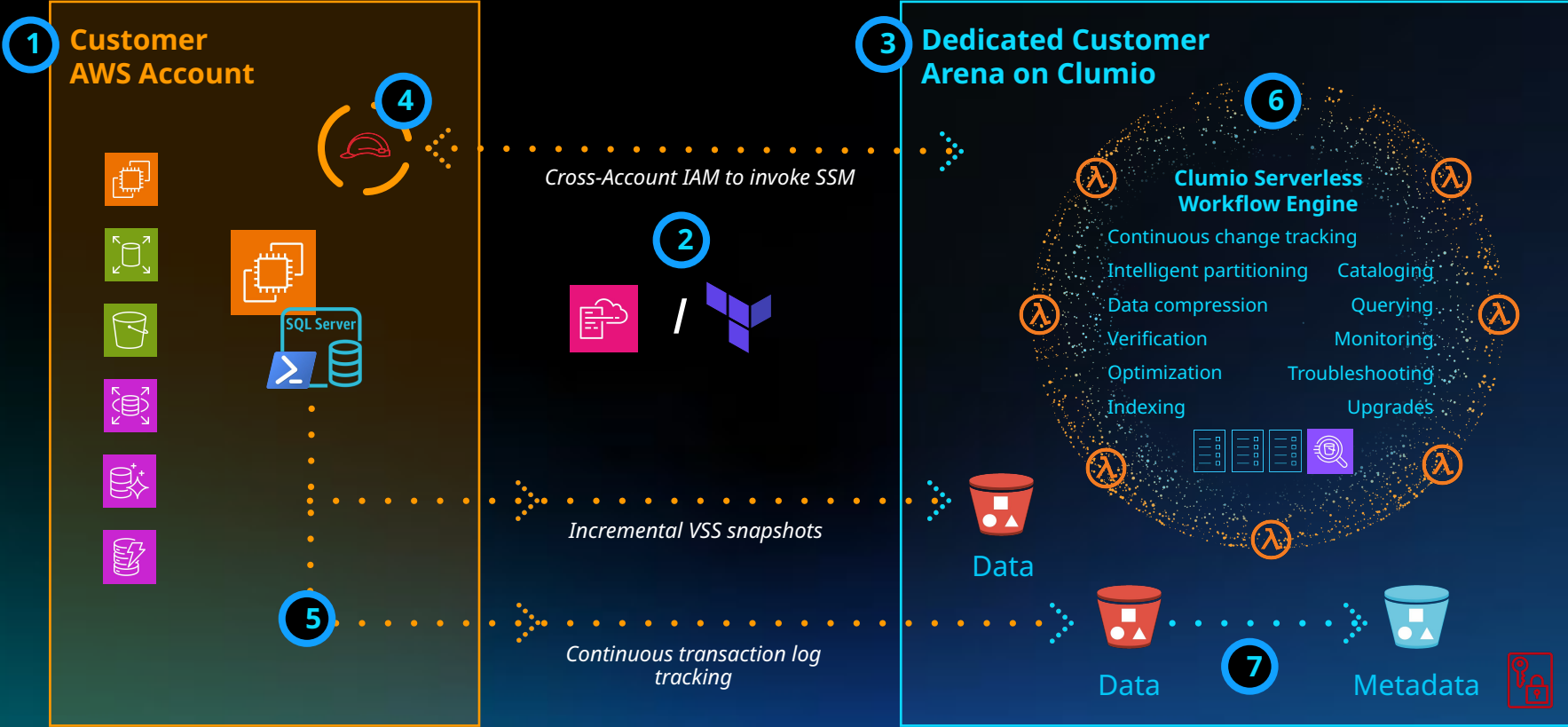


How does backup affect SQL Server performance?

- Performance ceilings can cause high read & write latency
- RAM limits can cause buffer pool flushing
 - Can slow performance even after the backup finishes
- Quiescing the database makes it unavailable

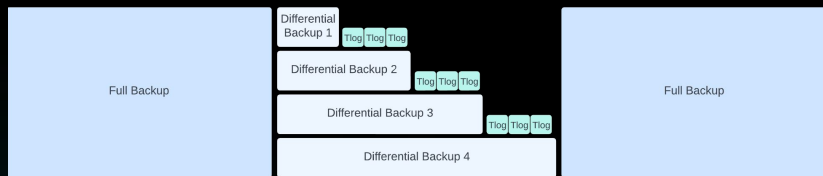


Architectural overview of Clumio for SQL Server on EC2

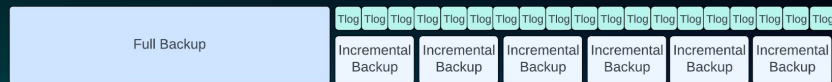


Incremental Forever Backups

Differential Backup



Incremental Backup



- First backup is a full
- Every backup after is incremental but acts as a full
- Lower space consumption than snapshots, full or differential backups
- Shorter backup times
- No dependencies on other backups (as in differential backups)
- Minimal load on DB servers

Point-In-Time Recovery

SQL Server data loss isn't a given!



- Find the exact point in time you need to recover to.
- Clumio combines your incremental backups and transaction logs, then restores them as one full.
- Data is restored in one step, up to the exact transaction needed.

How Clumio helps Database Engineers and IT Teams

SIMPLE, LOW RPO BACKUPS



Transaction log tracking = **15 min RPO**

Application consistency = **simple recoveries**

No custom tech to build / manage, reducing operational overheads

MINIMAL PERFORMANCE IMPACT



Availability Group aware = **no load on primary DB**

No external agents—Clumio uses EC2 SSM for backup operations, ensuring no additional compute load and costs

FAST RECOVERIES



Full control of backup & recovery posture for DBs

Point-in-time restore = simple operational roll backs

Parallelized restores ensure **low RTO**

How Clumio helps IT Teams

SECURE DATABASE BACKUPS



- Air-gapped
- Immutable
- End-to-end encrypted

MEET COMPLIANCE REQUIREMENTS & SLAs



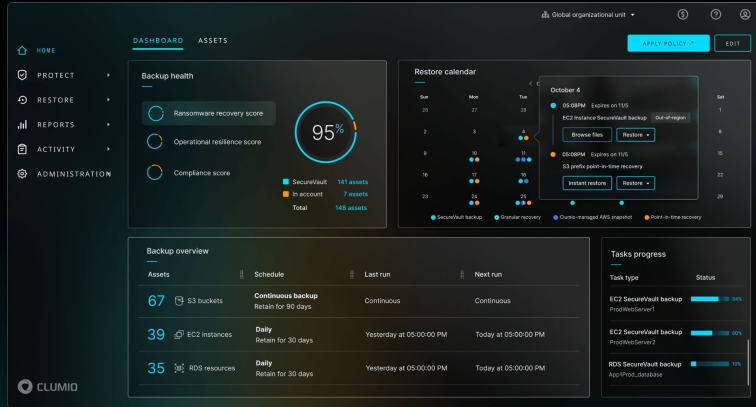
- Automated application of compliance-driven policies
- Minimized data loss
- Lightweight backups help ensure application uptime

COST VISIBILITY & REPORTING



- Consumption report for easy cost tracking
- Organizational unit support simplifies cost reporting

Continue exploring



<https://clumio.com/try>



<https://clumio.com/sqlguide>



