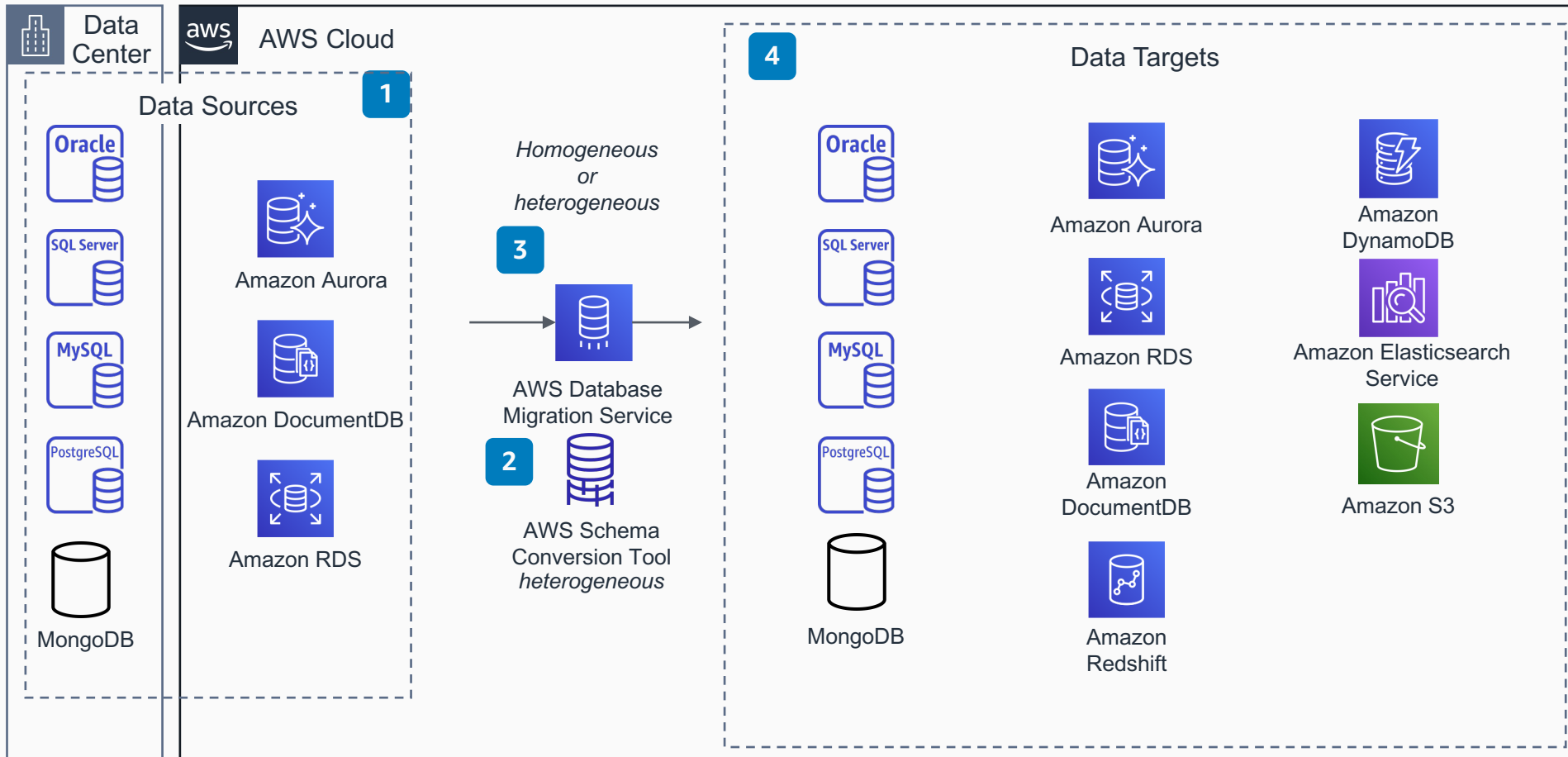


Change Data Capture using AWS Database Migration Service

Migrate and Replicate

This architecture enables customers to migrate databases using on-going replication.



- 1 Sources for change data capture (CDC) include Oracle, SQL Server, MySQL, PostgreSQL, MongoDB, **Amazon Aurora**, **Amazon DocumentDB**, and **Amazon RDS**.
- 2 The **AWS Schema Conversion Tool** makes heterogeneous database migrations predictable by automatically converting the source database schema and a majority of the database code objects to a format compatible with the target database.
- 3 **AWS Database Migration Service** helps you with one-time data migration of databases and continuous data replication. **AWS Database Migration Service** captures changes on the source database and applies them in a transactionally consistent way to the target.
- 4 Targets for CDC include Oracle, SQL Server, MySQL, PostgreSQL, MongoDB, **Amazon Aurora**, **Amazon DocumentDB**, **Amazon RDS**, and **Amazon S3**.

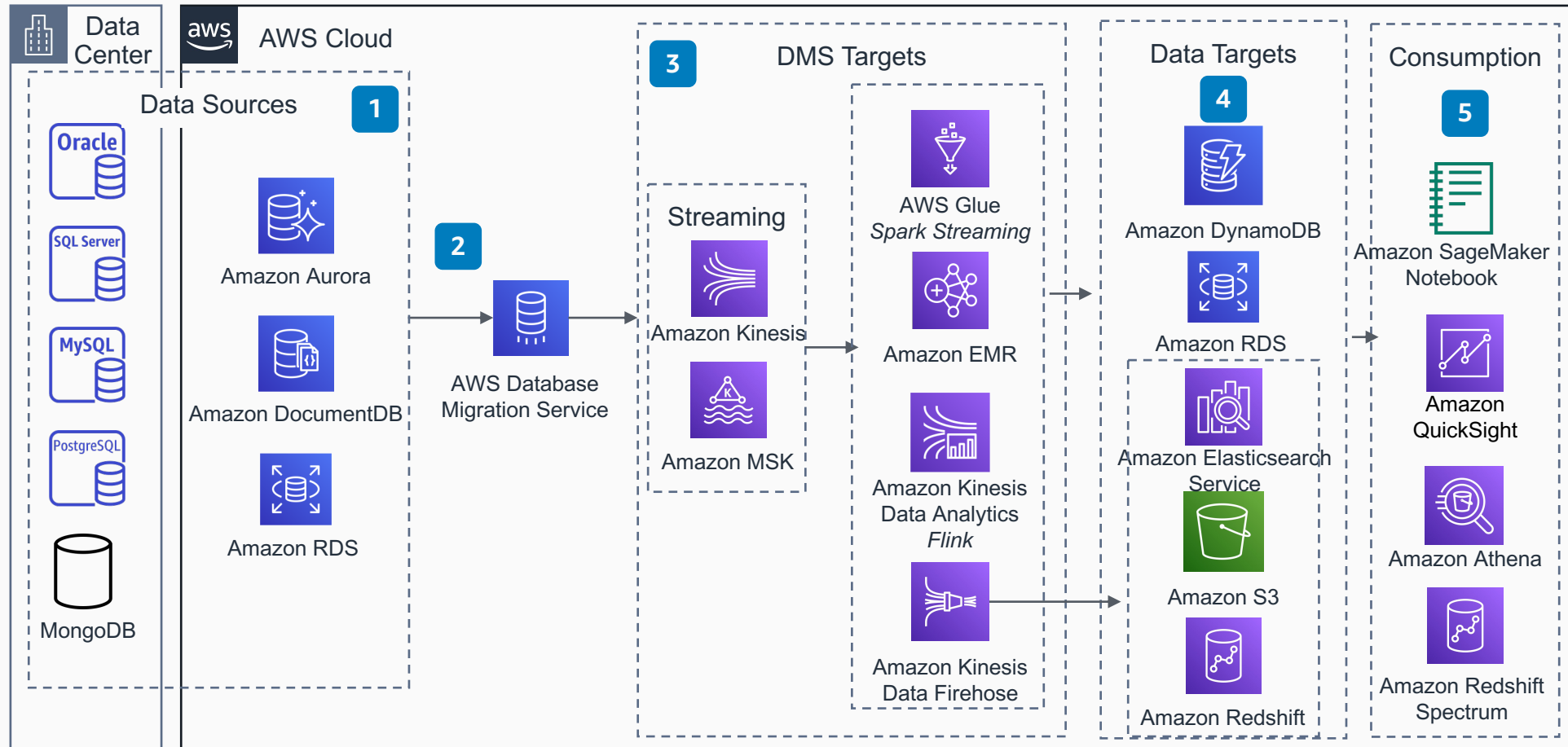


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AWS Reference Architecture

Change Data Capture using AWS Database Migration Service Streaming

This architecture enables customers to ingest real-time changes from source databases through streaming services.



- 1 Sources for change data capture (CDC) include Oracle, SQL Server, MySQL, PostgreSQL, MongoDB, **Amazon Aurora**, **Amazon DocumentDB**, and **Amazon RDS**.
- 2 **AWS Database Migration Service** helps you with one-time data migration of databases and continuous data replication. **AWS Database Migration Service** captures changes on the source database and applies them in a transactionally consistent way to the target.
- 3 You can use AWS DMS to stream data to an **Amazon Kinesis** data stream and **Amazon Managed Streaming for Apache Kafka (Amazon MSK)** to collect and process large streams of data.
- 4 You can use purpose-built services for analytics in your data lake or data warehouse.
- 5 You can visualize and consume data using **Amazon QuickSight**, **Kibana**, and **Amazon SageMaker Notebooks**.



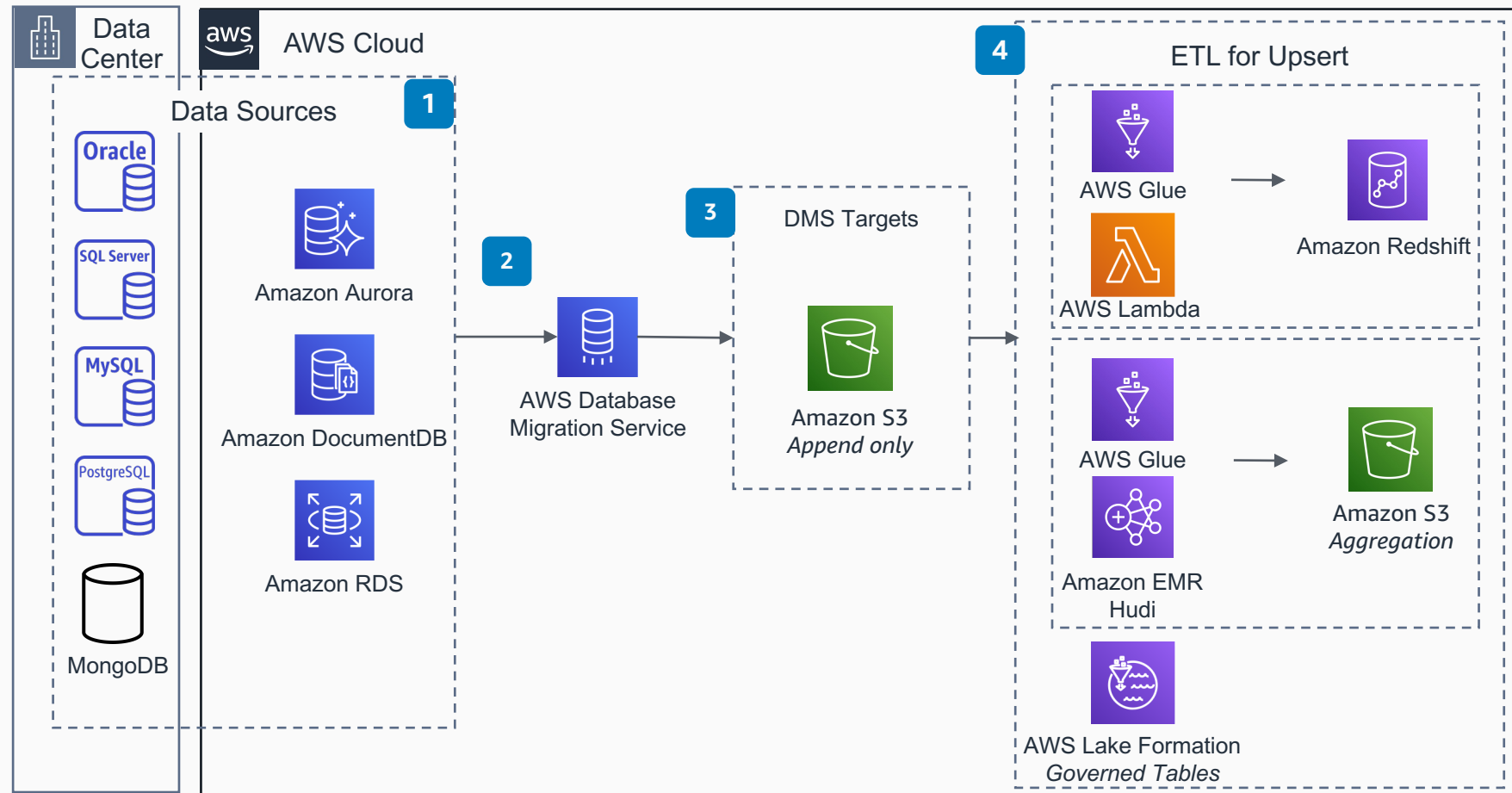
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AWS Reference Architecture

Change Data Capture using AWS Database Migration Service

Amazon S3 with Extract, Transform, Load (ETL) for Upsert

This architecture enables customers to create data pipelines with change data capture to build transactional data lakes.



- 1 Sources for change data capture (CDC) include Oracle, SQL Server, MySQL, PostgreSQL, MongoDB, **Amazon Aurora**, **Amazon DocumentDB**, and **Amazon RDS**.
- 2 **AWS Database Migration Service** helps you with one-time data migration of databases and continuous data replication. **AWS Database Migration Service** captures changes on the source database and applies them in a transactionally consistent way to the target.
- 3 The target for change data capture is **Amazon S3**.
- 4 You can use **AWS Glue**, **Amazon EMR** for extract, transform, load (ETL) upsert to **Amazon S3** and **Amazon Redshift**.