Examining Database Performance Options

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On-premises constraints

Cloud has options

Consider workload

Access patterns

Availability

Durability

Consistency

Latency

Scalability

Partition tolerance

Install on EC2

- Control environment
- Certified
- Specific tools

AWS Database Options

RDS

Relational Database Service

DynamoDB

Redshift

RDS

Default choice

Complex queries

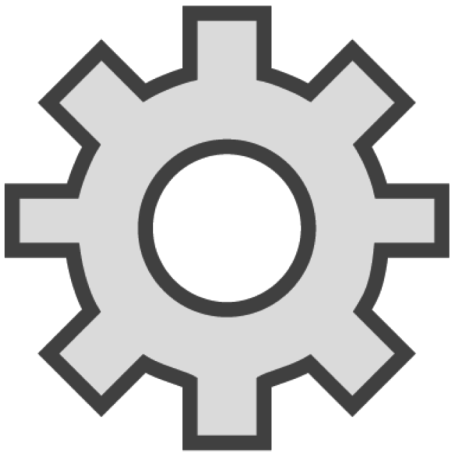
Consistent transactions

Multi-AZ

Read replicas

Encryption

Backups and snapshots



- Instance type
- Storage type
- Network setup
- Backup

DynamoDB

Flexible structure

Less complex queries

Low latency

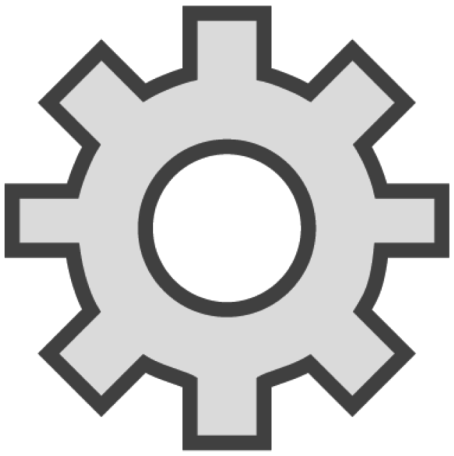
Transactions

Global tables

Encryption

Evolving schema

Integration with Lambda



Partition key

Secondary indexes

Capacity mode

Redshift

Large scale analytics

Setup in minutes

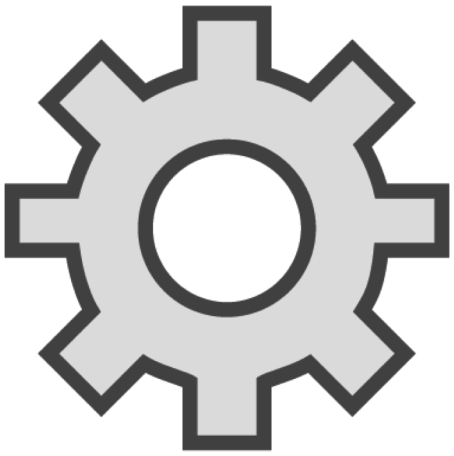
Warehouse and data lake

Encryption

Scale to petabytes

Query S3

Economical



Node type

- Dense compute
- Dense storage

Demo

Researching AWS database options

Applying Our Knowledge

Migrating to AWS Storage

Portfolio of web applications

Global presence

Data collection from clinical trials

Considerations for Choice

Minimal effort to migrate

Leverage managed services

Improve availability

RDS

Using SQL Server

Structured data

No servers to manage

Highly available

Built for the Cloud

New web application

Match medical devices to needs

Global user base

Considerations for Choice

Flexible data structure

Trigger action

Flexible cost structure

DynamoDB

NoSQL

Global tables

Lambda integration

On-Demand pricing

Monitor!

AWS Database Options

EC2

RDS

Relational Database Service

DynamoDB

Redshift

Network performance