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



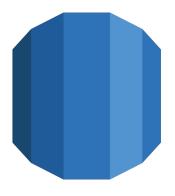


Install on EC2

- Control environment
- Certified
- Specific tools



AWS Database Options



RDS Relational Database Service

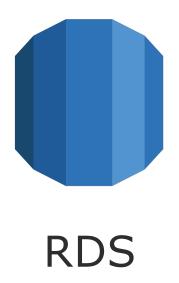


DynamoDB



Redshift





Default choice
Complex queries
Consistent transactions



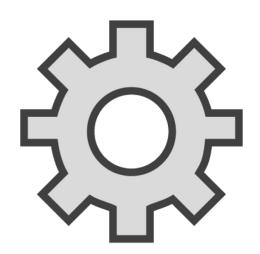
Multi-AZ

Read replicas

Encryption

Backups and snapshots





Instance type

Storage type

Network setup

Backup





Flexible structure
Less complex queries
Low latency





Transactions

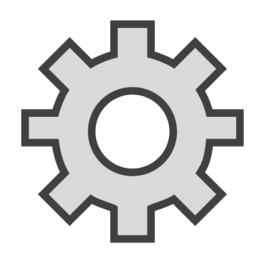
Global tables

Encryption

Evolving schema

Integration with Lambda





Partition key
Secondary indexes
Capacity mode





Large scale analytics
Setup in minutes
Warehouse and data lake



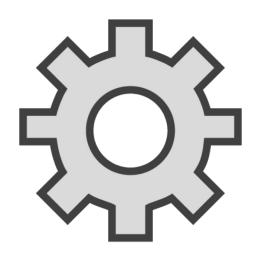
Encryption

Scale to petabytes

Query S3

Economical





Node type

- Dense compute
- Dense storage







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

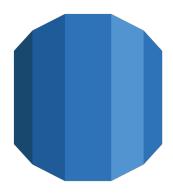


Leverage managed services



Improve availability





RDS

Using SQL Server
Structured data
No servers to manage
Highly available



Built for the Cloud

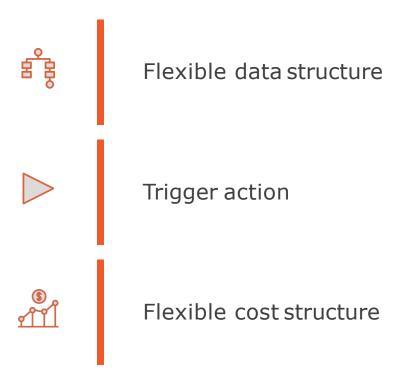


New web application

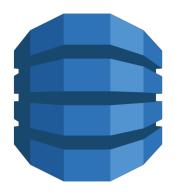
Match medical devices toneeds

Global user base

Considerations for Choice







DynamoDB

NoSQL

Global tables

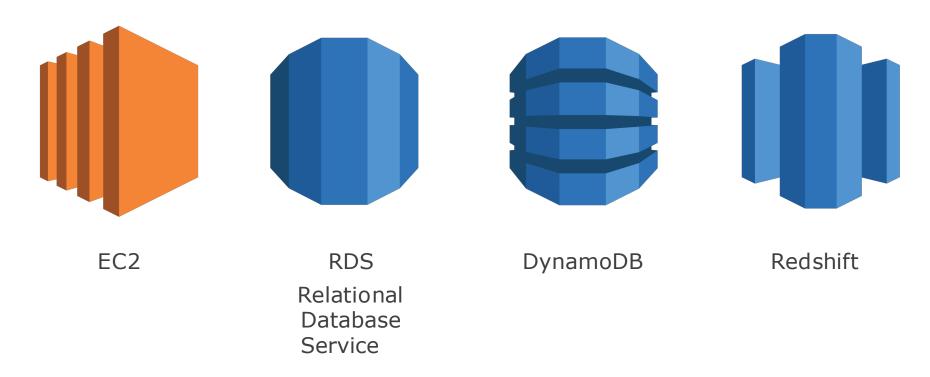
Lambda integration

On-Demand pricing

Monitor!



AWS Database Options







Network performance

