



AWS Databases



Today's Takeaways

- ▶ Introduction to Database
- ▶ Amazon RDS
- ▶ MySQL Workbench



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Introduction to Database

CLARUSWAY
WAY TO REINVENT YOURSELF



Introduction to Database

What is Database?



CLARUSWAY
WAY TO REINVENT YOURSELF



Introduction to Database

Type of Database?

Relational/SQL

Non-Relational/NoSQL

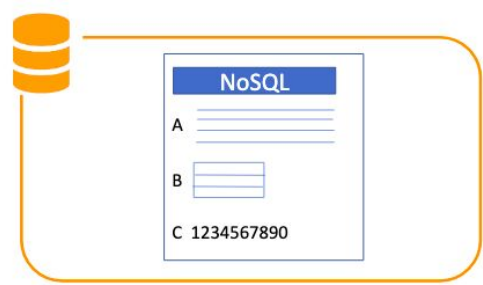
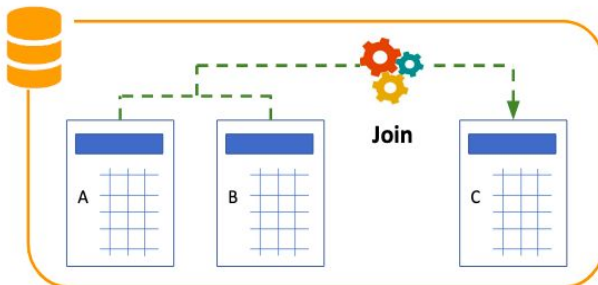


Introduction to Database

Type of Database?

Relational/SQL

Non-Relational/NoSQL



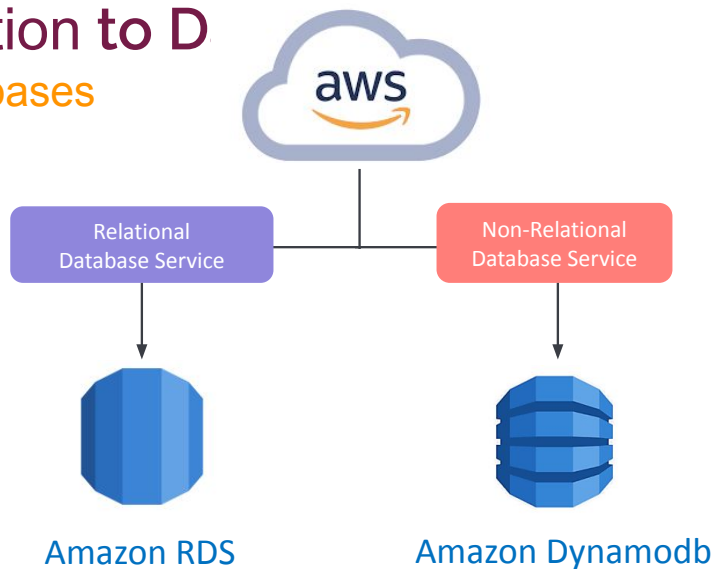
Introduction to Database

Type of Database?



Introduction to D

AWS Databases





Introduction to Database

SQL vs. NoSQL ?

SQL	NoSQL
Relational	Non-Relational
Table-based	Document-based, key-value pairs, graph databases or wide-column stores
Predefined Schema	Dynamic Schema
Uses SQL	As the name suggest, it doesn't use SQL
Used for complex queries	Used for simple queries
Available for Join function	Not available for Join function

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Amazon RDS



RDS

What is RDS?



Amazon RDS



RDS

Basic Components



Amazon RDS



Database Engines



EC2

AMI



Instance Type

t2.micro

Storage Disk/
Root Volume



db.t2.micro



DB Instance

Storage Disk





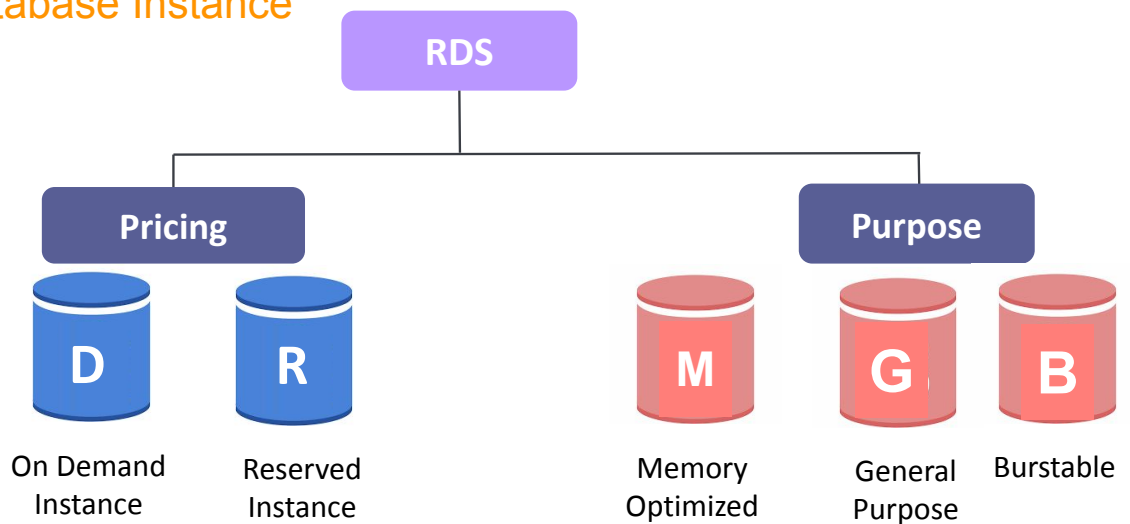
RDS

Database Engines



RDS

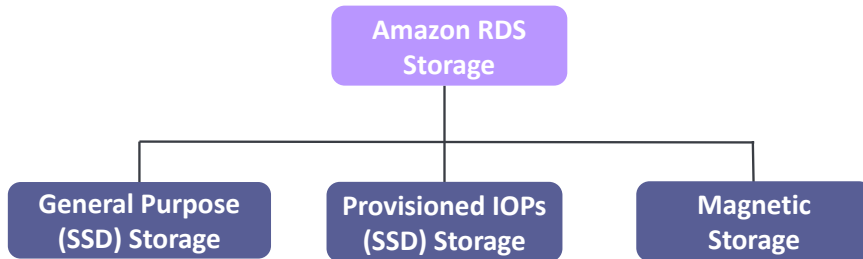
Database Instance





RDS

Instance Storage



Cost-effective

Fast and consistent I/O

Not recommended

There is an important factor in the databases as much as CPU and RAM power, which is the value of **IOPs of storage**



RDS

MySQL Workbench

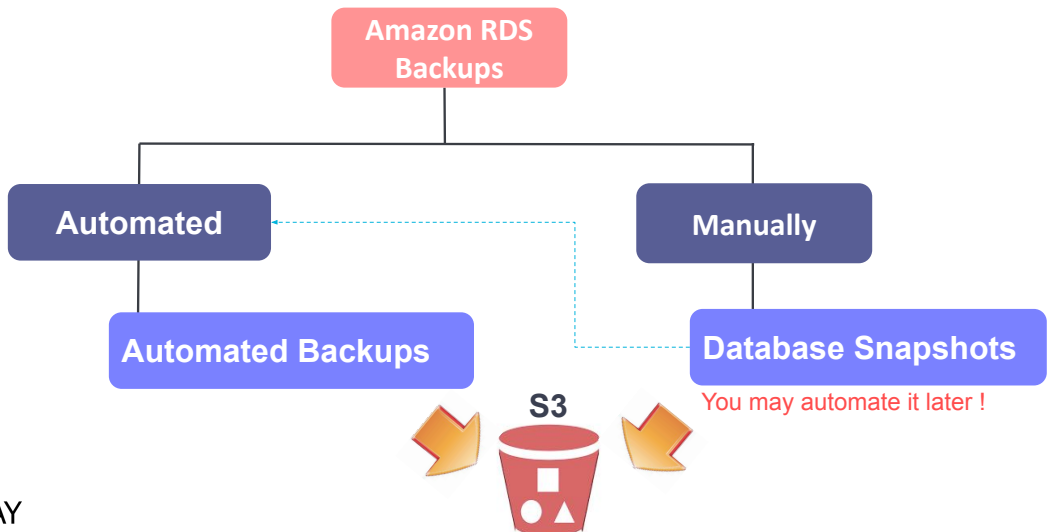


MySQL Workbench = Graphical tool for working with MySQL databases.



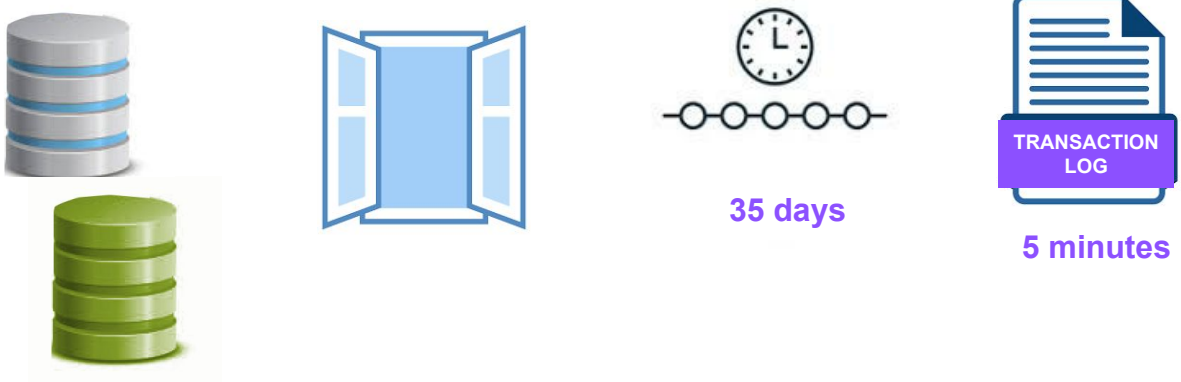
RDS

DB Instance Backups



RDS

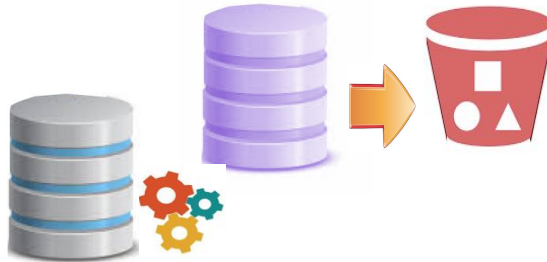
DB Instance Automated Backups





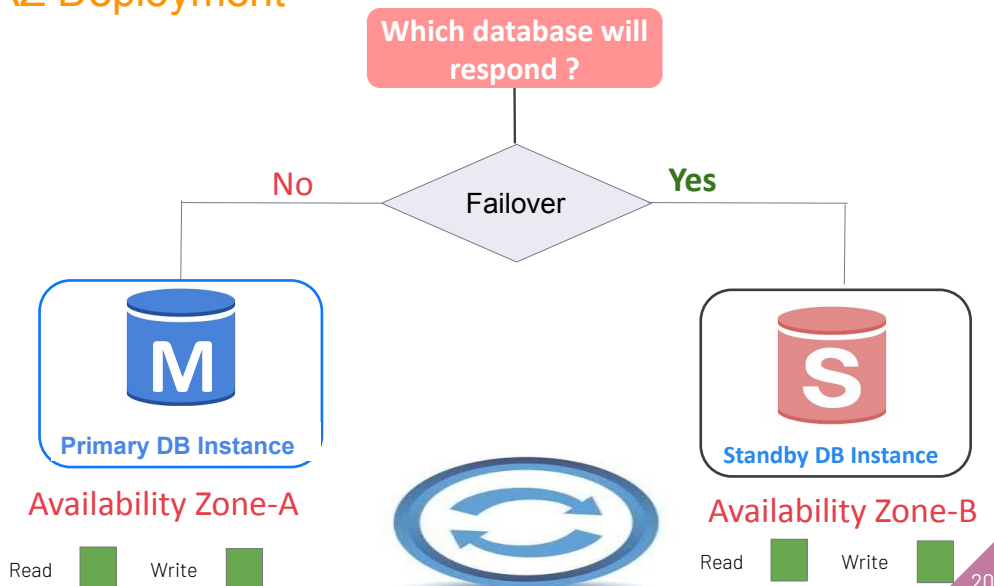
RDS

DB Instance Snapshot



RDS

RDS Multi-AZ Deployment



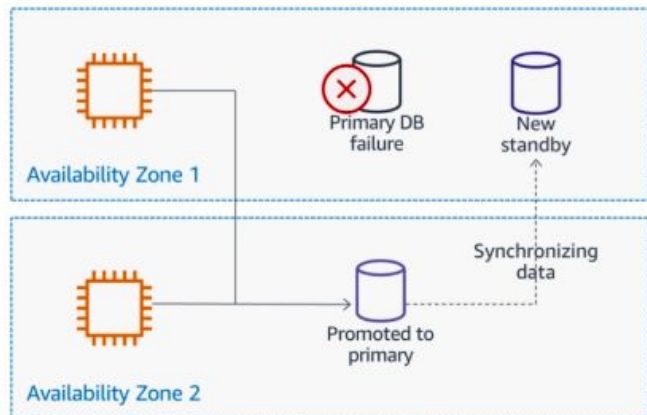


RDS

RDS Multi-AZ Deployment

Amazon RDS Multi-AZ failover

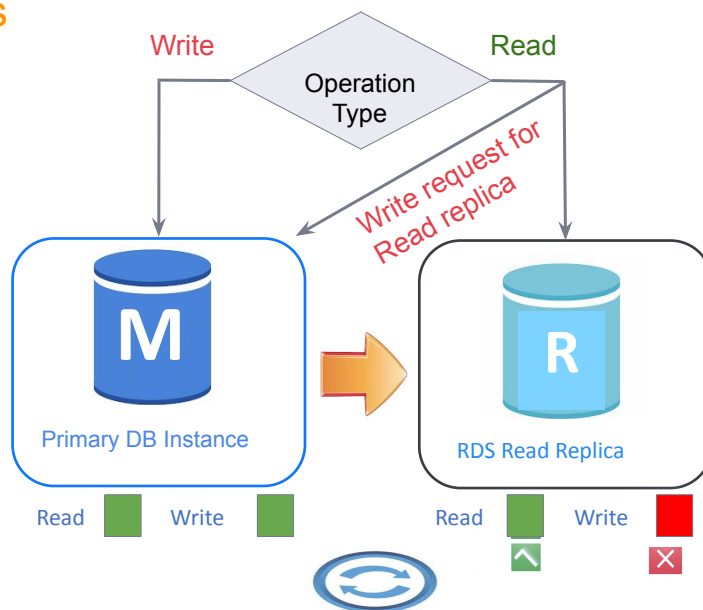
Upon failure, the standby DB instance picks up the load.



RDS

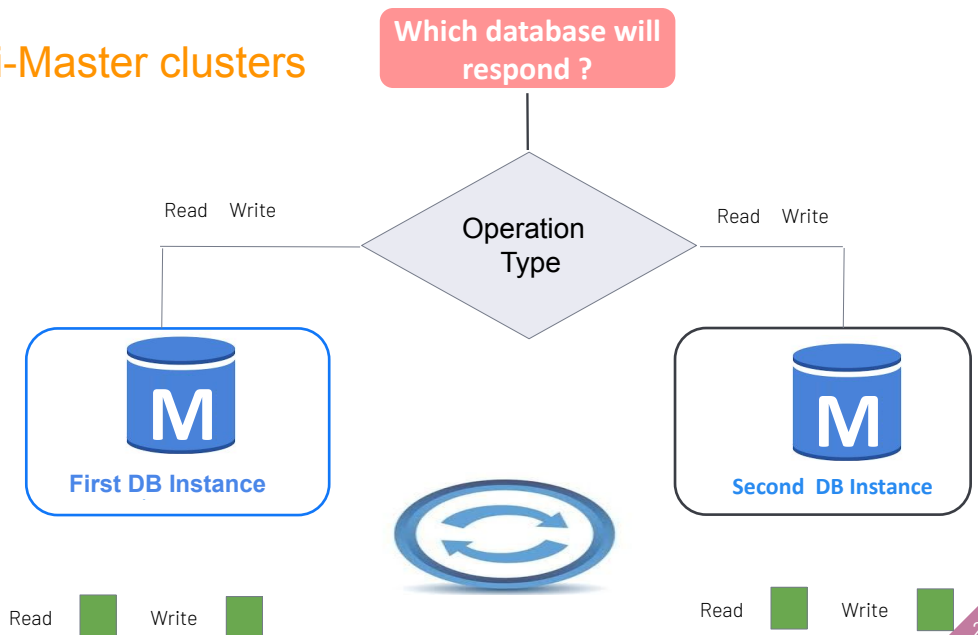
Read Replicas

Which database will respond ?



RDS

Aurora Multi-Master clusters



RDS

Let's get our hands dirty!

- Creating a RDS Instance
- Connecting DB via MySQL Workbench



THANKS!

Any questions?

