

# **AWS Databases**







# Today's Takeaways

- Introduction to Database
- Amazon RDS
- MySQL Workbench









#### What is Database?







Type of Database?

Relational/SQL

Non-Relational/NoSQL

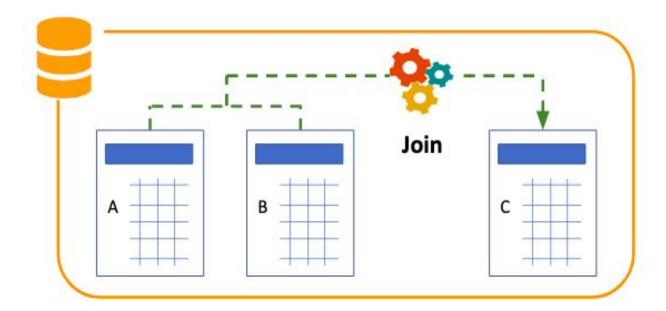


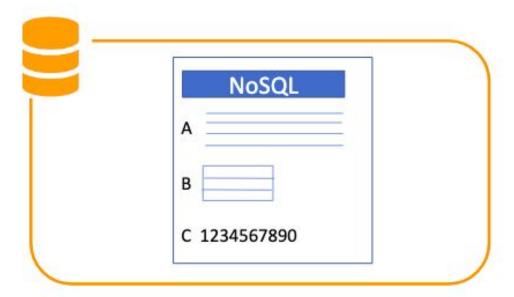


#### Type of Database?

Relational/SQL

Non-Relational/NoSQL







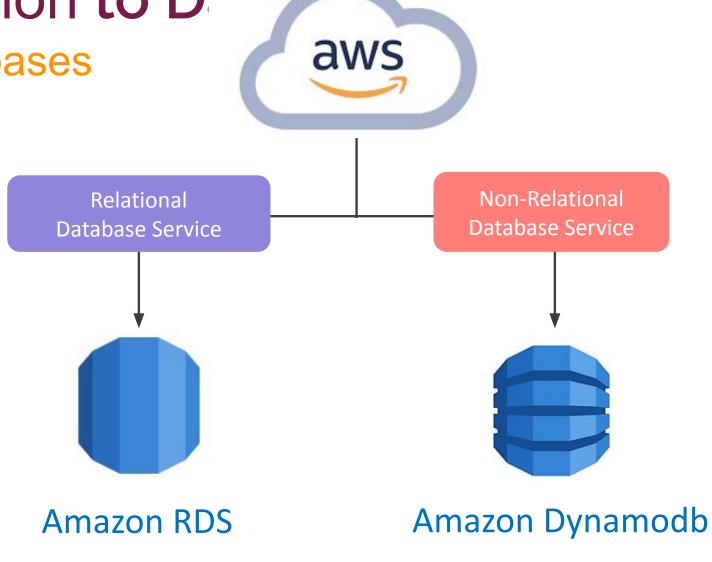
Type of Database?



## Introduction to D



**AWS Databases** 







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 <b>Join</b> function	Not available for <b>Join</b> function



# 2 Amazon RDS



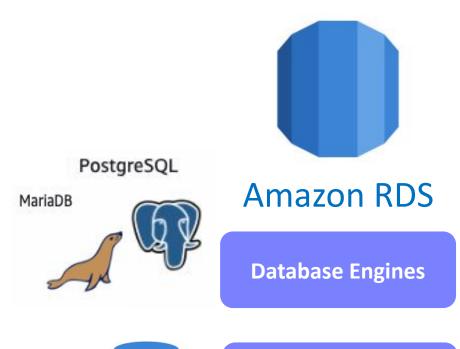


#### What is RDS?





#### **Basic Components**







**DB** Instance



**Storage Disk** 



EC2

AMI



Instance Type



Storage Disk/ Root Volume



#### **Database Engines**







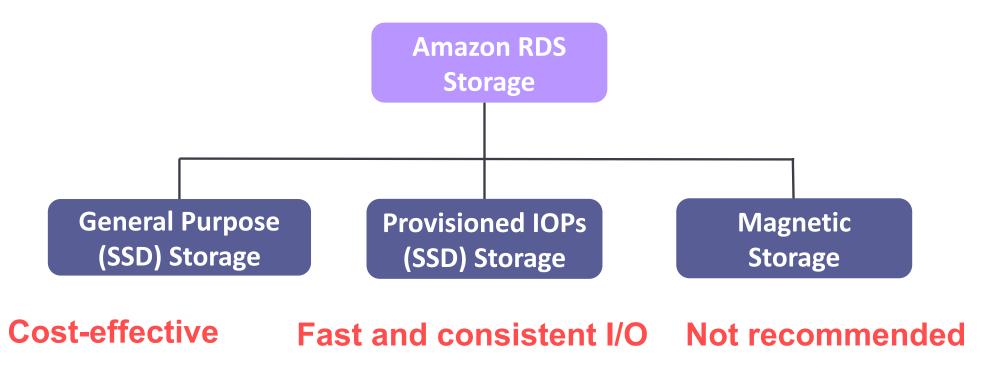
#### **Database Instance**

**RDS Pricing Purpose** M On Demand Burstable Reserved Memory General Optimized Instance Instance Purpose





#### Instance Storage

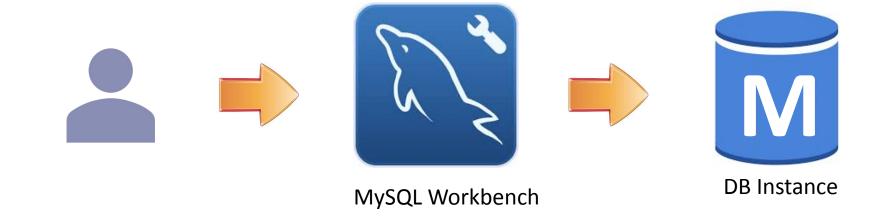


There is an important factor in the databases as much as CPU and RAM power, which is the value of IOPs of storage





#### MySQL Workbench

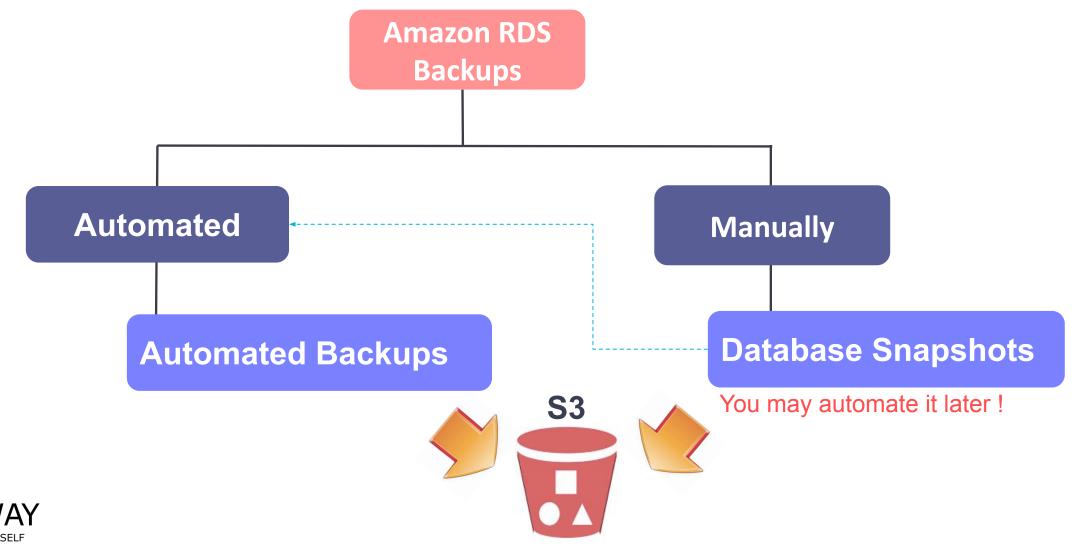


MySQL Workbench = Graphical tool for working with MySQL databases.





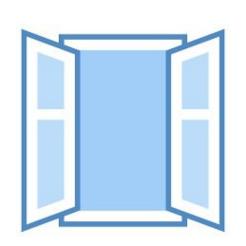
#### **DB Instance Backups**

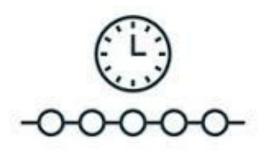




#### **DB Instance Automated Backups**











5 minutes



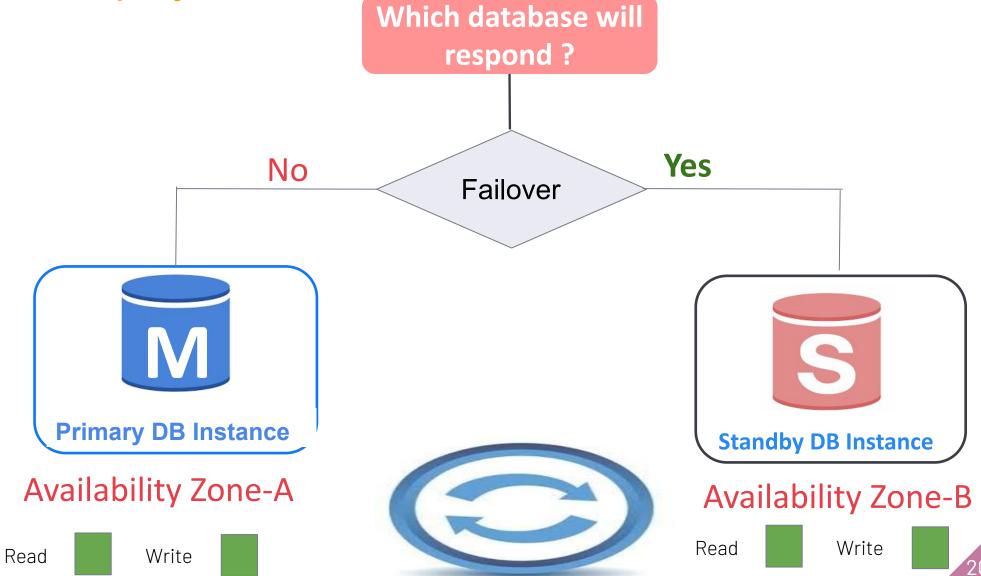
#### **DB** Instance Snapshot







RDS Multi-AZ Deployment



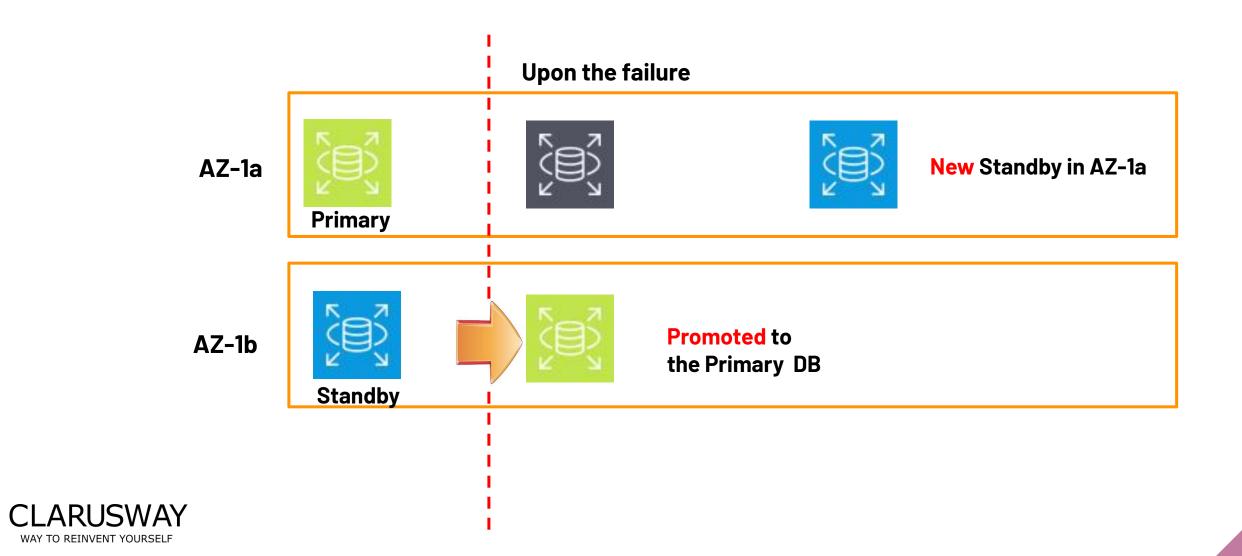








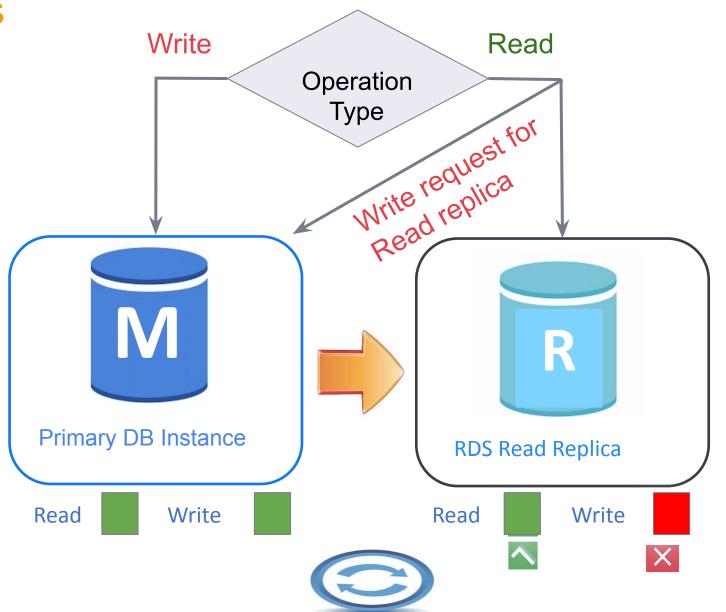
#### RDS Multi-AZ Deployment Life Cycle



Read Replicas

Which database will respond?









**Aurora Multi-Master clusters** 

Which database will respond? Read Write Read Write Operation Type **First DB Instance Second DB Instance** 













Write



# Let's get our hands dirty!

- Creating a RDS Instance
- Connecting DB via MySQL Workbench





# THANKS! ?

Any questions?



