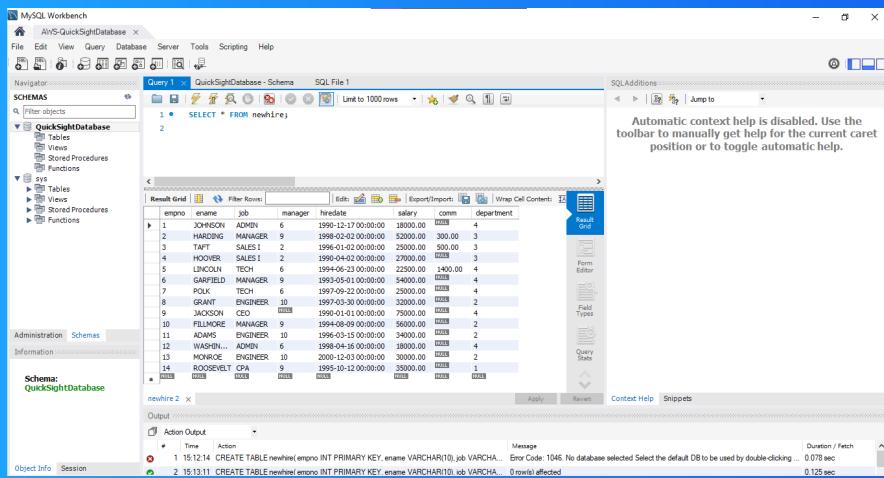




Visualise a Relational Database

 devops methodology



Introducing Today's Project!

What is Amazon RDS?

It is a type of database that organizes data into tables, which are collection of rows and columns, called it relational as rows are related to columns and vice-versa.

How I used Amazon RDS in this project

In this project i have just created RDS instance and MySql workbench query the data and populating i have just used AWS QuickSight for visualisation with proper explanation.

One thing I didn't expect in this project was...

The layout, explanation and the quality of teaching is just awesome.

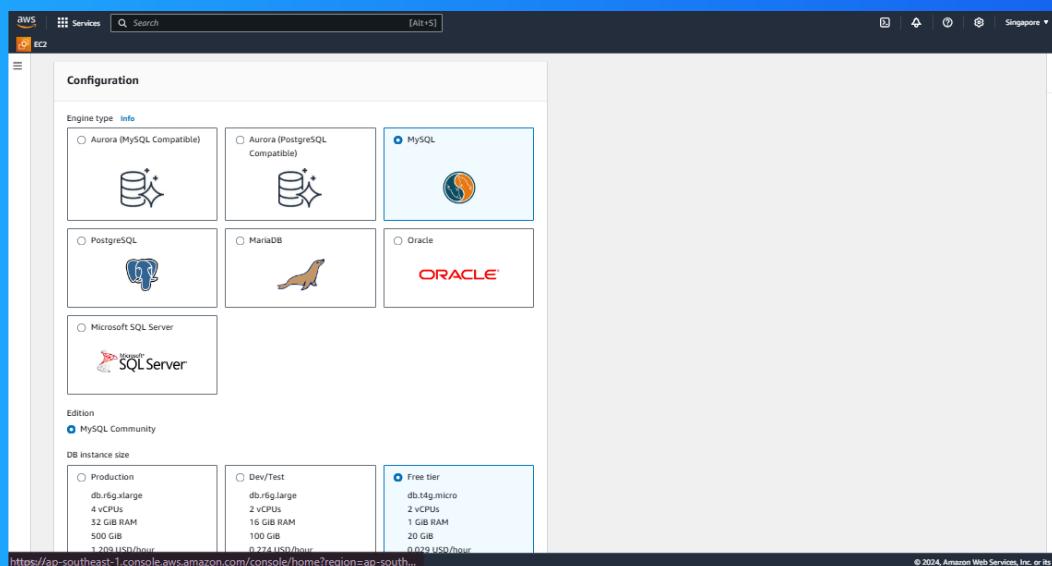
This project took me...

It took me around 1.5 hrs as i am taking also note with lab,a great way to start.

In the first part of my project...

Creating a Relational Database

I have just searched for RDS in search and following the easycreate option, set up the name and login details of database.



Understanding Relational Databases

Relational database is a type of database which organizes data into tables, which is a collection of rows and columns, where rows are related to columns and vice-versa.

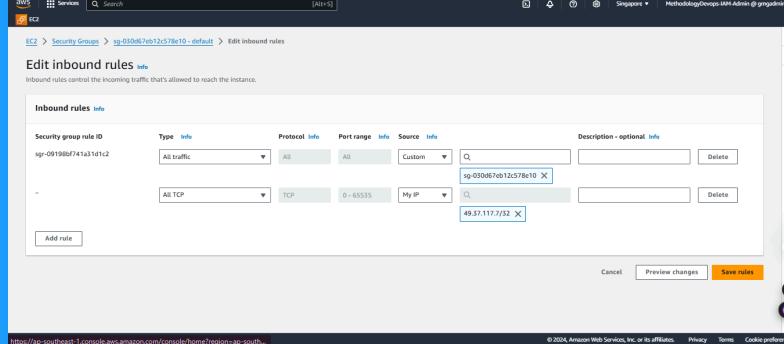
MySQL vs SQL

MySQL is a relational database management system which uses SQL language to interact with RDS (Relational Database). MySQL is a software used to create, manage & interact with RDS where as through MySQL we will query by SQL by managing and manipulating.

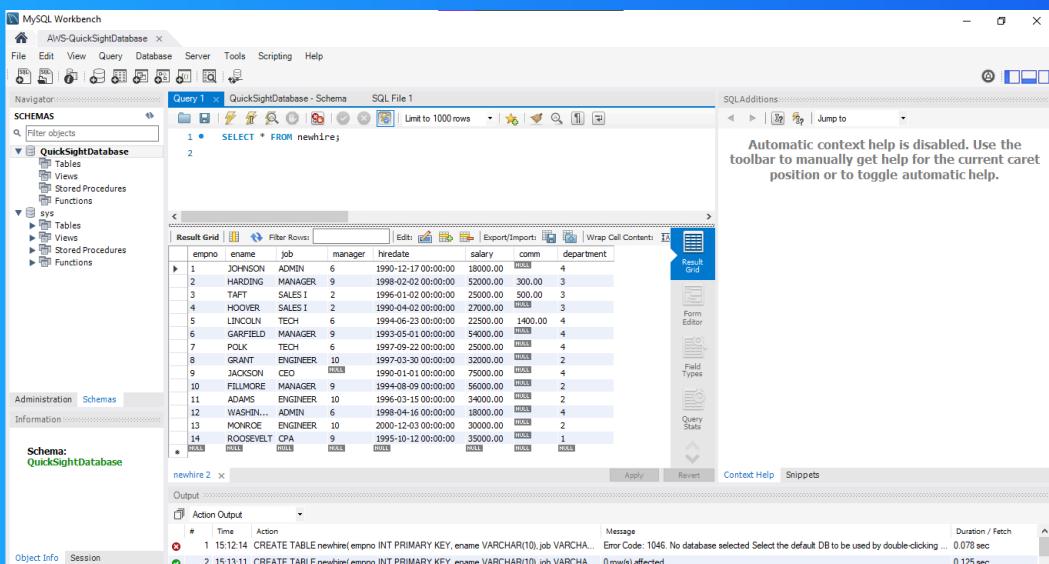
Populating my RDS instance

So that the outside of AWS network can connect with RDS like AWS MySQL workbench.

As Default security group allows traffic going into and out of the database we have to give permission to MySQL workbench to connect with our database so we are modifying security group.



Using MySQL Workbench



I have just used my SQL Workbench and i have just pasted the queries to see the results as to populate the data with our data as an visual representation as rows and columns with tables.

Connecting QuickSight and RDS

Ist of all i have just modify the security group in RDS instance allow inbound traffic from Amazon QuickSight ie.(0.0.0.0/0) from anywhere can access RDS instance and just datasource added RDS instance in QuickSight service.

As in the security group all inbound traffic is allowed to RDS instance and so it will be publicly available anyone can hack through IP address as it is publicly available, major security concern will arise.

A better strategy

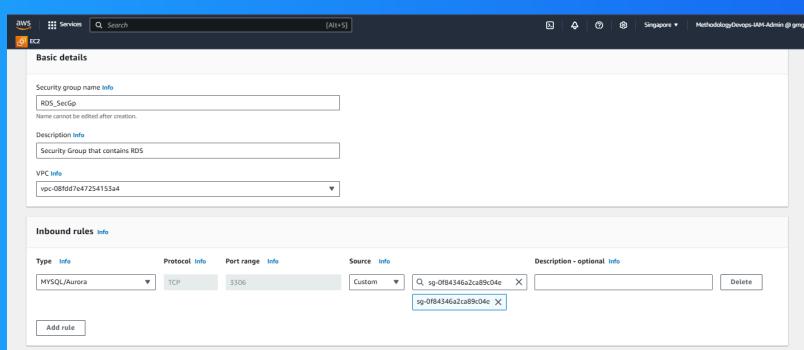
I made a security group for QuickSight in the default VPC and later will attach to Amazon Quicksight.

By creating IAM role i.e aws-quicksight-service-role-v0. and create a policy and attach to it. In this policy.View ec2 resources,manage network interfaces and pass IAM roles(allowing passing roles to services).

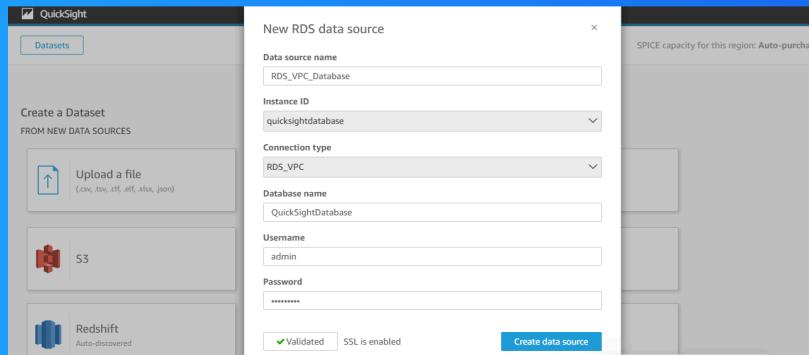
Now to secure my RDS instance

1st of all i have modified DB instance to not publicly accessible and then i have just modify security group by adding MYSQL/Aurora and source as QuickSight security group,so that only traffic can come to RDS instance.

By modifying in security group i.e inbound rules from Mysql to security group of RDS instance which will allow access or query from RDS instance to QuickSight.



Adding RDS as a data source for QuickSight



Because it is much more secure as it is not publicly available and can access through quicksight only.





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