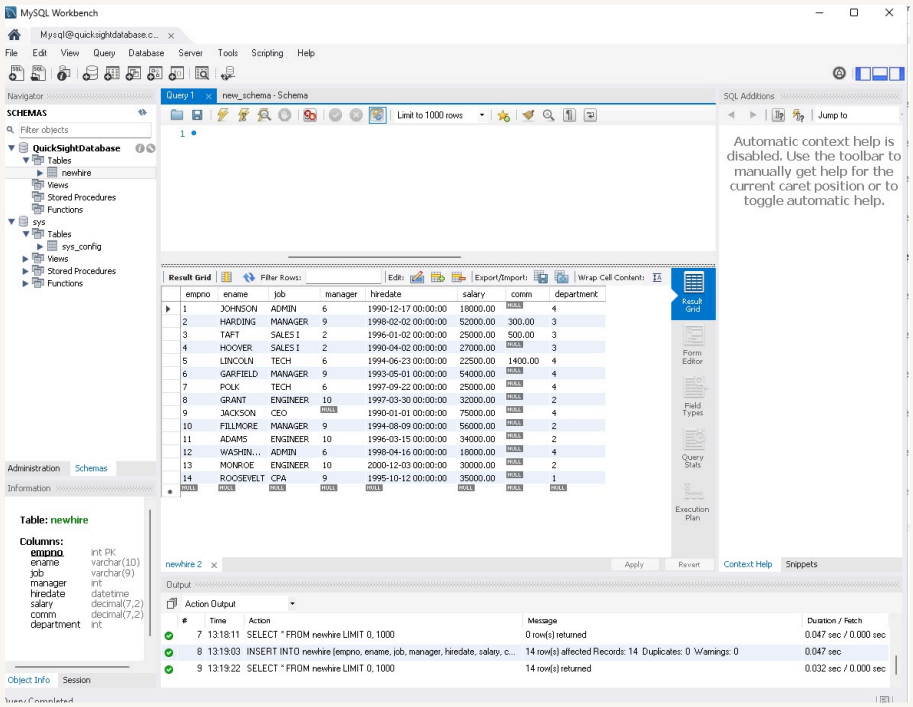
Visualise a Relational Database

A Antonio C



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Introducing Today's Project!

What is Amazon RDS?

Amazon RDS (Relational Database Service) is a fully managed cloud service by AWS that makes it easy to set up, operate, and scale relational databases. No need to install, patch, or maintain the database software yourself

How I used Amazon RDS in this project

I used RDS to create a relational database that I populated using MySQL Workbench. I then visualized my data using Quicksight.

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

How much Security Group action there was

This project took me...

It took me about 1 and a half hours

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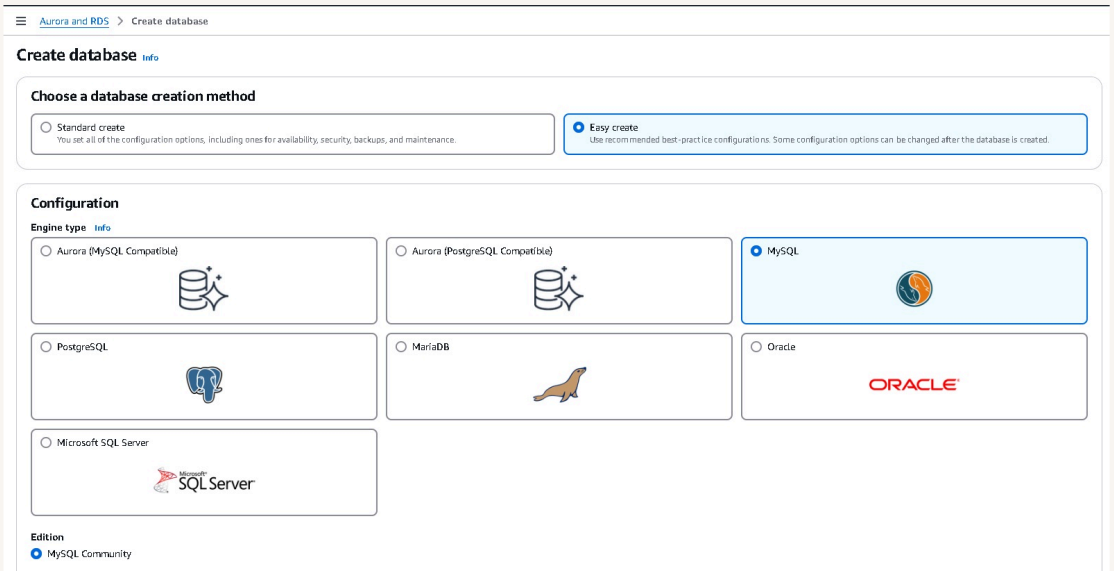
In the first part of my project...

Creating a Relational Database

I created my relational database by going to AWS and following easy create steps. I set up the name and login details of my database



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Understanding Relational Databases

A relational database is a type of database where the data is structured and a way that it relates to itself. It is kind of like an excel spreadsheet with columns and rows to relate data

MySQL vs SQL

The difference between MySQL and SQL is SQL is a query language for extracting data from a database. MySQL is the framework for setting up a relational database. Its widely considered a classic.

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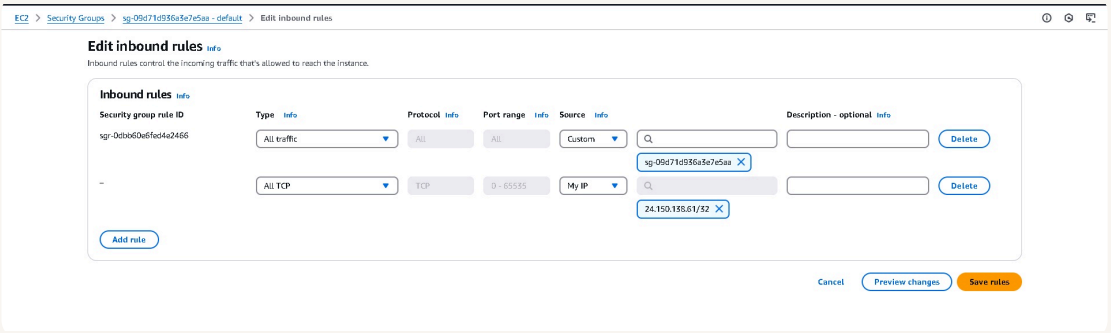
Populating my RDS instance

The first thing I did was make my RDS instance public because I need to connect to it from my SQL Workbench

Il had to update the default security group for my RDS schema because security groups are controlling and decide what traffic can access the AWS resources within it. I added my IP address as an accepted inbound rule.



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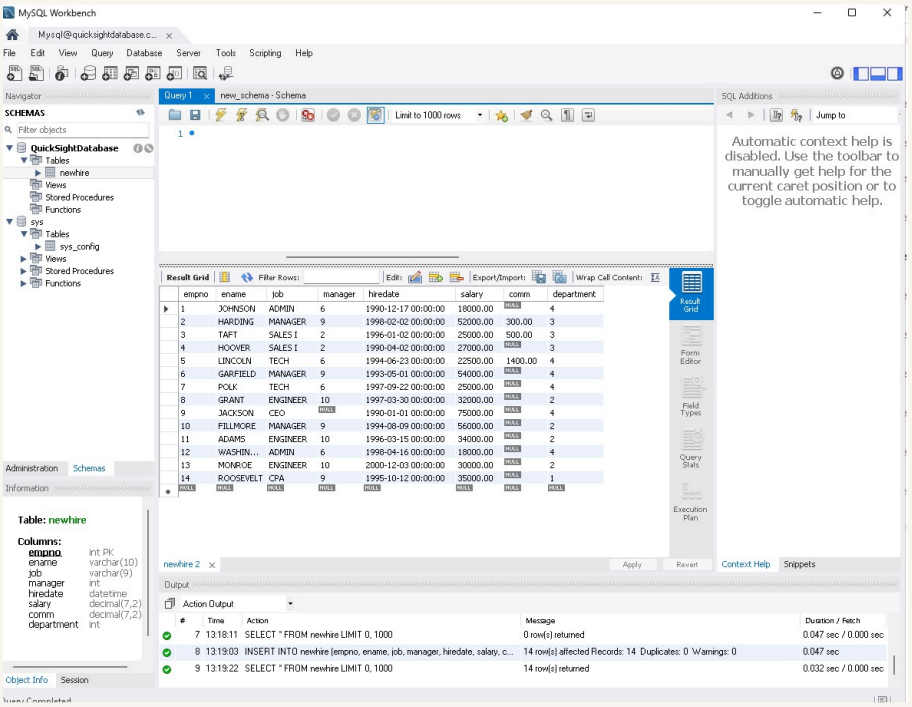
Using MySQL Workbench



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To populate my database I used SQL in MySQL database Workbench app to create, and populate my database tables. First, I had to connect my RDS instance to MySQL using the Endpoint, port, username, and password.

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Connecting QuickSight and RDS

To connect my RDS instance to QuickSight I made my security group around my RDS instance, allowed traffic from my IP address so that QuickSight can connect easily.

This solution is risky because anyone can access our RDS instance not just QuickSight. This is bad because the person might be malicious and data is important to keep private

A better strategy

First, I made a new security group so that my QuickSight will be secure

Next, I connected my new security group to QuickSight by creating a connection to QuickSight and my VPC and then my security group. I had to update my IAM role that was used to do this.

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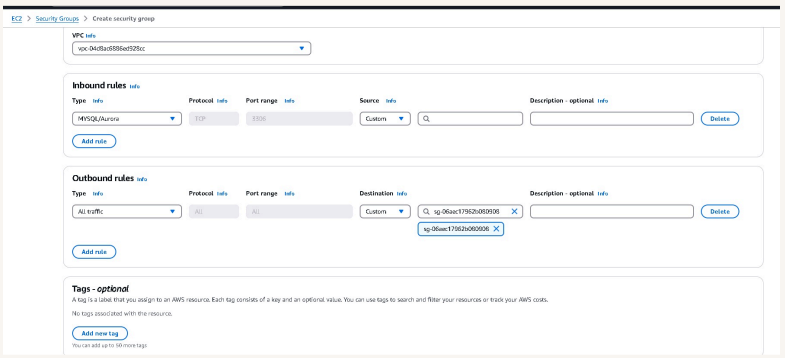
Now to secure my RDS instance

To make my RDS instance secure I let it not be publicly accessible and then created a new security group for my RDS instance

I made sure that my RDS instance could be accessed from QuickSight by creating the correct inbound rules that allowed access for querying of my RDS instance from my QuickSight security group



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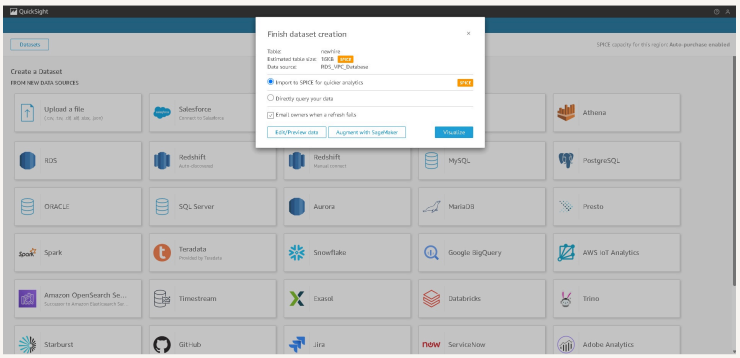
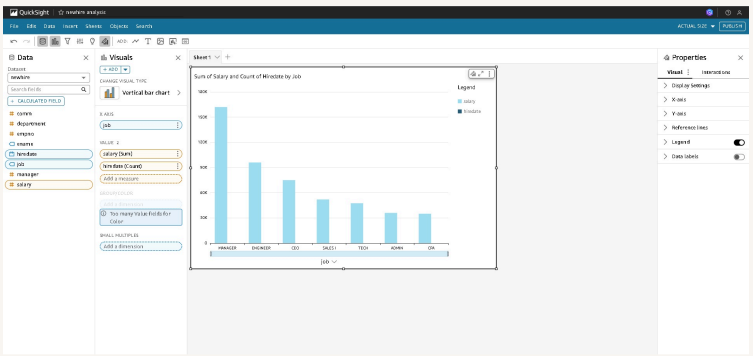
Adding RDS as a data source for QuickSight



This data source is different from my initial data source because it is secure! We are using security groups to access our data in a much more secure way rather than the defaults or things just being private.



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