



Visualize a Relational Database

TA

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Result Grid

		Filter Rows:		Edit:		Export/Import:		Wrap Cell Content:	
empno	ename	job	manager	hiredate	salary	comm	deptno		
1	JOHNSON	ADMIN	6	1990-12-17 00:00:00	18000.00	NULL	4		
2	HARDING	MANAGER	9	1998-02-20 00:00:00	52000.00	300.00	3		
3	TAFT	SALES I	2	1996-01-02 00:00:00	25000.00	500.00	3		
4	HOOVER	SALES I	2	1990-04-02 00:00:00	27000.00	NULL	3		
5	LINCOLN	TECH	6	1991-06-32 00:00:00	22500.00	1400.00	4		
6	GARFIELD	MANAGER	9	1993-05-01 00:00:00	54000.00	NULL	4		
7	PARKER	TECH	6	1997-09-22 00:00:00	25000.00	NULL	4		
8	GRANT	ENGINEER	10	1997-03-30 00:00:00	32000.00	NULL	2		
9	JACOBSON	CEO	NULL	1990-01-01 00:00:00	75000.00	NULL	4		
10	FILLMORE	MANAGER	9	1994-08-09 00:00:00	56000.00	NULL	2		
11	ADAMS	ENGINEER	10	1998-03-15 00:00:00	34000.00	NULL	2		
12	WASHIN...	ADMIN	6	1998-04-16 00:00:00	30000.00	NULL	4		
13	MONROE	ENGINEER	10	2000-12-03 00:00:00	30000.00	NULL	2		
14	ROOSEVELT	CPA	9	1995-10-12 00:00:00	35000.00	NULL	1		
	NULL	NULL	NULL	NULL	NULL	NULL	NULL		

Result Grid

Form Editor

Field Types

Query Stats

Execution Plan

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Introducing Today's Project!

What is Amazon RDS?

Amazon RDS is a cloud-based relational database service that makes it easy to set up, operate, and scale a relational database in the AWS cloud. It provides automated administration, continuous monitoring, and backup.

How I used Amazon RDS in this project

I used Amazon RDS in today's project to store and manage the data to create the dashboard in QuickSight. RDS provided a reliable and scalable database solution that was easy to set up and configure.

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

n/a

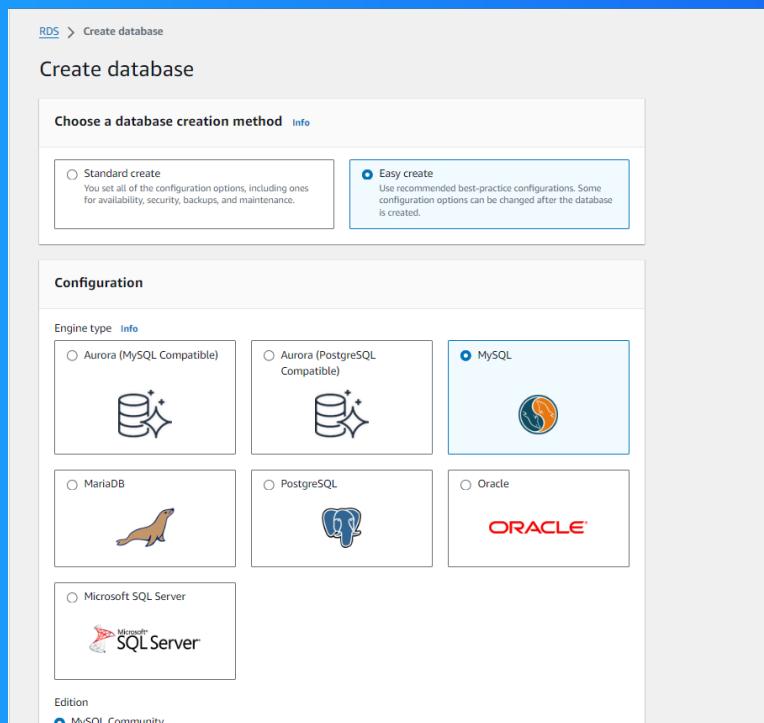
This project took me...

2 hours

In the first part of my project...

Creating a Relational Database

I created my relational database by going to RDS in AWS and following the Easy Create Steps. I then set up the database's name and login details.





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Understanding Relational Databases

A relational database is a collection of data organized into tables, each consisting of rows and columns. Common fields define the relationships between the tables, allowing for efficient data retrieval and management.

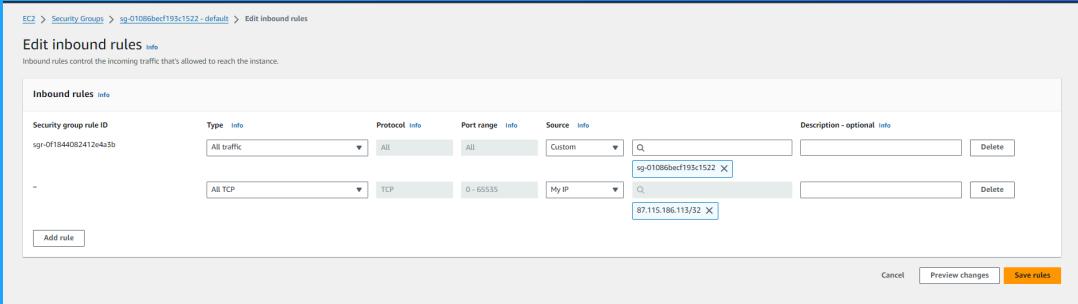
MySQL vs SQL

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

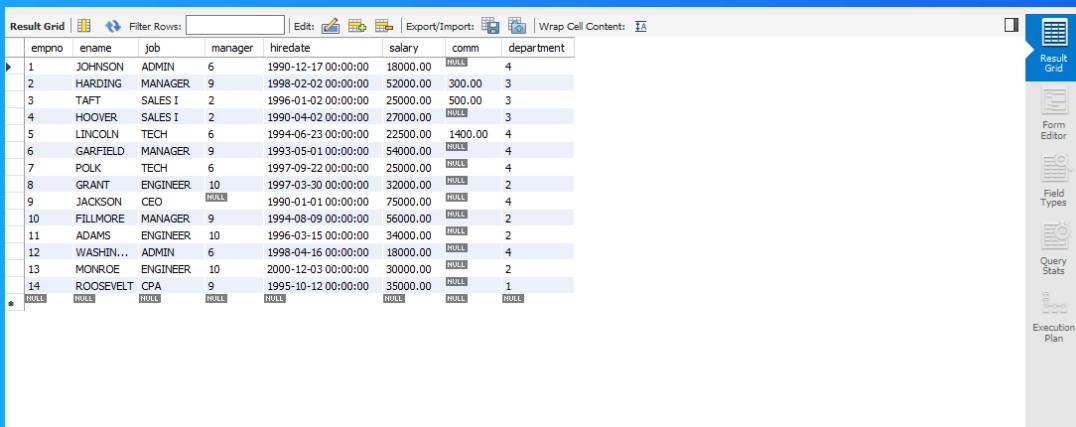
Populating my RDS instance

The first thing I did was make my RDS instance public because i needed to connect to it from MYSQL Workbench

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



Using MySQL Workbench



The screenshot shows the MySQL Workbench interface with a result grid displaying data from a table. The table has columns: empno, ename, job, manager, hiredate, salary, comm, and department. The data includes rows for various employees like Johnson, Harding, Taft, Hoover, Lincoln, Garfield, Polk, Grant, Jackson, Fillmore, Adams, Washington, Monroe, and Roosevelt. The 'Result Grid' tab is selected in the sidebar.

	empno	ename	job	manager	hiredate	salary	comm	department
1	1	JOHNSON	ADMIN	6	1990-12-17 00:00:00	18000.00	NULL	4
2	2	HARDING	MANAGER	9	1998-02-02 00:00:00	52000.00	300.00	3
3	3	TAFT	SALES I	2	1996-01-02 00:00:00	25000.00	500.00	3
4	4	HOOVER	SALES I	2	1990-04-02 00:00:00	27000.00	NULL	3
5	5	LINCOLN	TECH	6	1994-06-23 00:00:00	22500.00	1400.00	4
6	6	GARFIELD	MANAGER	9	1993-05-01 00:00:00	54000.00	NULL	4
7	7	POLK	TECH	6	1997-09-22 00:00:00	25000.00	NULL	4
8	8	GRANT	ENGINEER	10	1997-03-30 00:00:00	32000.00	NULL	2
9	9	JACKSON	CEO	NULL	1990-01-01 00:00:00	75000.00	NULL	4
10	10	FILLMORE	MANAGER	9	1994-08-09 00:00:00	56000.00	NULL	2
11	11	ADAMS	ENGINEER	10	1996-03-15 00:00:00	34000.00	NULL	2
12	12	WASHIN...	ADMIN	6	1998-04-16 00:00:00	18000.00	NULL	4
13	13	MONROE	ENGINEER	10	2000-12-03 00:00:00	30000.00	NULL	2
14	14	ROOSEVELT	CPA	9	1995-10-12 00:00:00	35000.00	NULL	1
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

To populate my database, I used SQL in MySQL 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.

Connecting QuickSight and RDS

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

This solution is risky because anyone can access our RDS instance, not just quicksight.

A better strategy

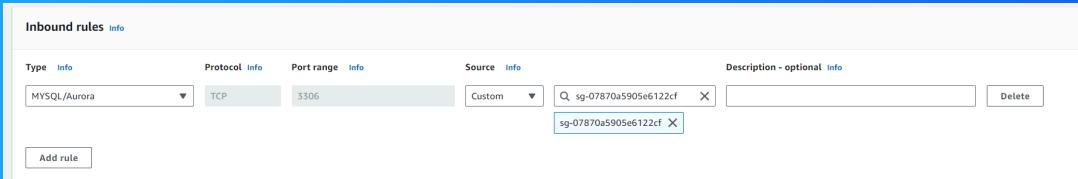
First, I made a new security group so that my quick sight will be secure

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

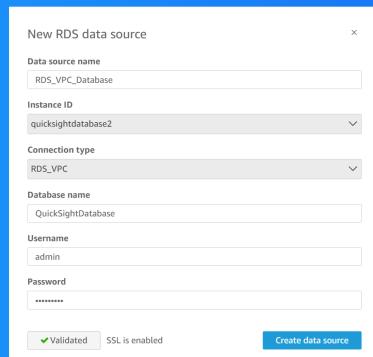
Now to secure my RDS instance

To make my RDS instance secure, I made it not publicly accessible and then created a new security group for it.

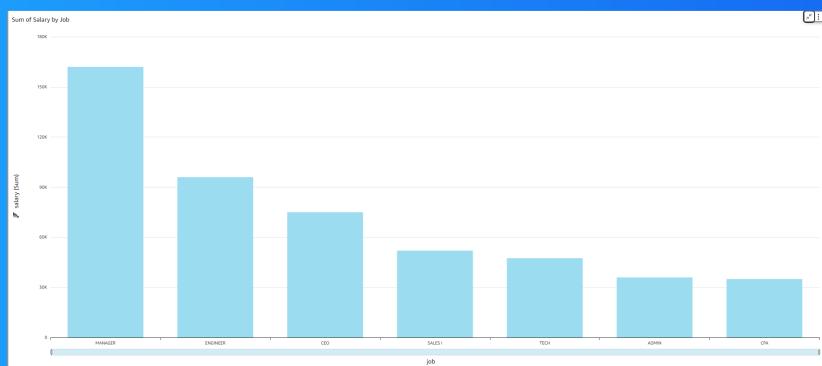
I made sure that my RDS instance could be accessed from QuickSight by creating the correct inbound rules that allowed access or querying of my RDS instance from my QuickSight security group



Adding RDS as a data source for QuickSight



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





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job they love.**

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