



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

Experiment - 9

Student Name: Yash Goel
Branch: BE-CSE
Semester: 5th
Subject Name: ADBMS

UID: 23BCS11498
Section/Group: KRG-2B
Date of Performance: 27/10/25
Subject Code: 23CSP-333

1. Aim:

To design and interact with cloud-based data storage systems using AWS RDS, Google Firebase, and Azure Cosmos DB, focusing on relational modeling, real-time synchronization, and distributed data access.

2. Output

The screenshot shows the AWS RDS Master User Password configuration interface. At the top, there's a navigation bar with the AWS logo, 'Services' dropdown, 'Search' bar, and a keyboard shortcut '[Alt+S]'. Below the navigation is a search bar with placeholder text 'Type a login ID for the master user of your DB instance.' containing the value 'admin'. A note below it says '1 to 16 alphanumeric characters. The first character must be a letter.' Under 'Credentials management', there are two options: 'Managed in AWS Secrets Manager - most secure' (radio button unselected) and 'Self managed' (radio button selected). A note next to 'Self managed' says 'Create your own password or have RDS create a password that you manage.' Below these are two checkboxes: 'Managed in AWS Secrets Manager - most secure' (unchecked) and 'Auto generate password' (unchecked). A note under 'Auto generate password' says 'Amazon RDS can generate a password for you, or you can specify your own password.' There are fields for 'Master password' (containing '*****') and 'Confirm master password' (containing '*****'). Both fields have 'Info' links. Below these fields is a 'Password strength' bar labeled 'Strong'. A note below the password fields says 'Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / \ " @'. At the bottom, there's a section titled 'Instance configuration' with a note: 'The DB instance configuration options below are limited to those supported by the engine that you selected above.'

Creating database sql2022
Your database might take a few minutes to launch. You can use settings from sql2022 to simplify configuration of [suggested database add-ons](#) while we finish creating your DB for you.

RDS > Databases

Consider creating a Blue/Green Deployment to minimize downtime during upgrades
You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases. [RDS User Guide](#) [Aurora User Guide](#)

Databases (1)

DB identifier	Status	Role	Engine	Region & AZ	Size	Recommendations
sql2022	Creating	Instance	SQL Server Standard Edition	us-east-1b	db.m5.large	

Successfully created database sql2022
You can use settings from sql2022 to simplify configuration of [suggested database add-ons](#) while we finish creating your DB for you.

RDS > Databases > sql2022

sql2022

Summary

DB identifier sql2022	Status Configuring-enhance d-monitoring	Role Instance	Engine SQL Server Standard Edition	Recommendations
CPU -	Class db.m5.large	Current activity	Region & AZ us-east-1b	

Connectivity & security | Monitoring | Logs & events | Configuration | Maintenance & backups | Tags | Recommendations

SQLQuery1.sql - sql2022.ccbkoco727za.us-east-1.rds.amazonaws.com.master (admin (86)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query | Execute | Add | Save | Refresh | Back | Forward | Home | Stop | Help | Quick Launch (Ctrl+Q)

master | Execute | Add | Save | Refresh | Back | Forward | Home | Stop | Help | Quick Launch (Ctrl+Q)

Object Explorer

- sql2022.ccbkoco727za.us-east-1.rds.amazonaws.com (SQL Server 1)
 - Databases
 - System Databases
 - master
 - model
 - msdb
 - tempdb
 - Database Snapshots
 - rdsadmin
 - r2schools
 - Database Diagrams
 - Tables
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Query Store
 - Service Broker
 - Storage
 - Security
 - Security
 - Logins
 - Server Roles
 - Credentials
 - Cryptographic Providers
 - Audits

Login - New

Select a page

Script ▾ Help

Login name: r2admin Search...

Windows authentication SQL Server authentication

Password: Confirm password:

Specify old password

Old password:
 Enforce password policy
 Enforce password expiration
 User must change password at next login

Mapped to certificate
 Mapped to asymmetric key
 Map to Credential

Mapped Credentials

Add

Connection

Server: EC2AMAZ-OLA51TB
Connection: admin

View connection properties

ModifyInboundSecurityGroup

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-0d8472b8adce9cf6e

aws Services Search [Alt+S]

EC2 > Security Groups > sg-0d8472b8adce9cf6e - default > Edit inbound rules

Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

Security group rule ID	Type <small>Info</small>	Protocol <small>Info</small>	Port range	Source <small>Info</small>	Description - optional <small>Info</small>
sgr-0cbad942ac2402cbe	All traffic	All	All	Custom	Q sg-0d8472b8adce9cf6e X
-	MSSQL	TCP	1433	My IP	Q 49.43.226.187/32 X

Add rule

aws Services Search [Alt+S]

Amazon RDS

RDS > Databases > sql2022

sql2022

Summary

DB identifier sql2022	Status Available	Role Instance	Engine SQL Serv		
CPU <div style="width: 3.36%;">3.36%</div>	Class db.m5.large	Current activity <div style="width: 0%;">0.00 sessions</div>	Edition Edition		
Subnet groups	Connectivity & security	Monitoring	Logs & events	Configuration	Maintenance & backups

Connectivity & security

Endpoint & port	Networking	Security
Endpoint sql2022.ccbkoco727za.us-east-1.	Availability Zone us-east-1b	VPC security groups default (sg-0d8472b8adce9cf6e)

Events

Event subscriptions