



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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## Experiment 9

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Branch: CSE

Semester: 5th

Subject Name: ADBMS

UID: 23BCS12327

Section/Group: KRG 3-A

Date of Performance: 30/10/2025

Subject Code: 23CSP-333

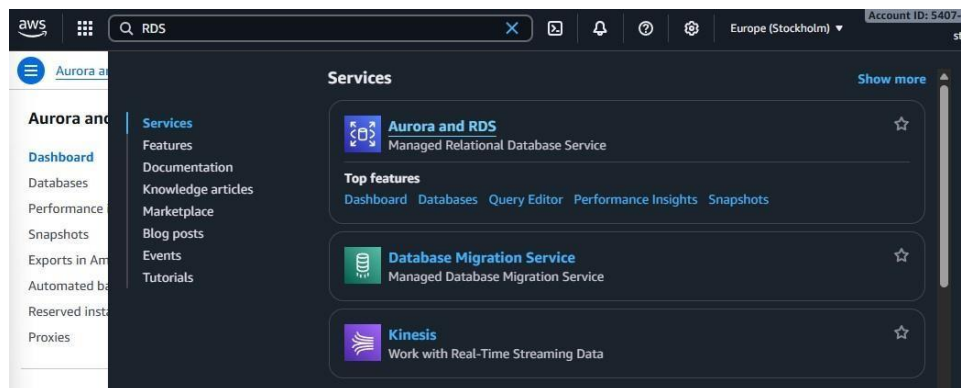
### 1. Aim:

AWS RDS

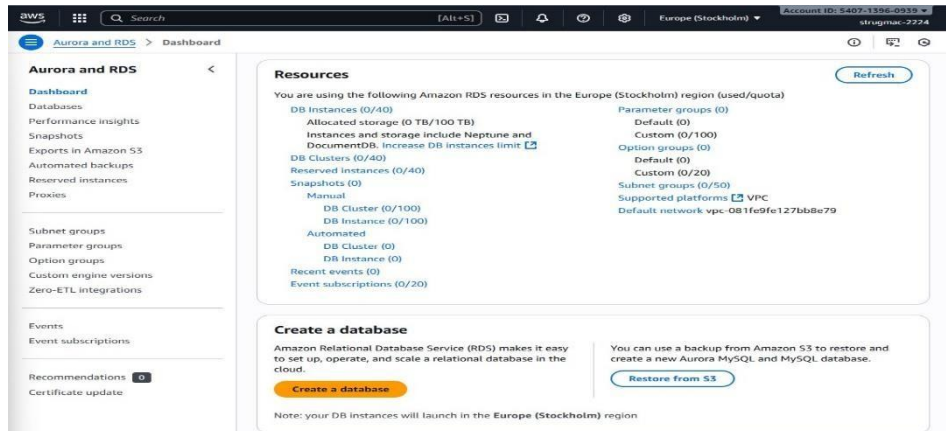
- OVERVIEW OF AWS RDS
- CREATION OF DATABASE INSTANCE ON AWS RDS
- SECURITY GROUPS
- CONNECTING LOCAL PGADMIN TO CLOUD RDS

1. GO TO AWS HOMEPAGE -> CLICK ON SIGN IN-> ENTER USER NAME WITH EMAIL ADDRESS.

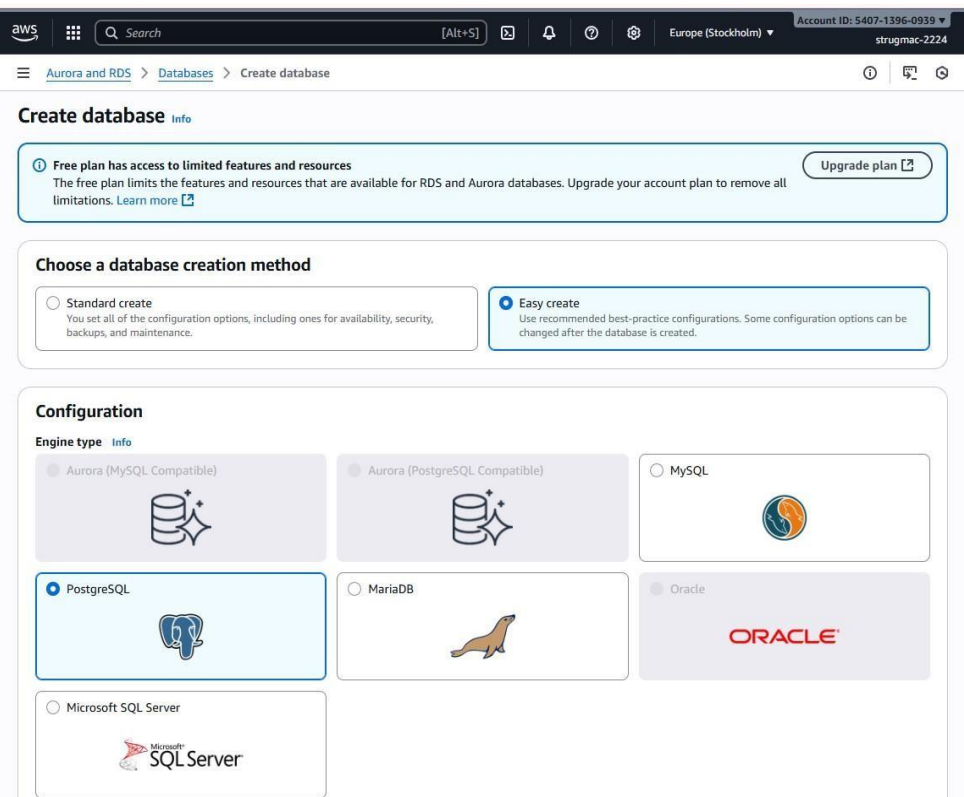
2. AFTER SIGN-IN -> GO TO SEARCH BAR -> SEARCH FOR RDS -> HIT ENTER



3. HOW TO CREATE MY SQL DATABASE INSTANCE ON AWS RDS?



#### 4. CLICK ON CREATE DATABASE



5. IN THE STANDALONE CREATE, WE CAN SET EVERYTHING FOR OUR DATABASE, THE INCOMING TRAFFIC, IP ADDRESSES TO BE USED, BACKUP ETC.



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## DB instance size

☐ Production  
db.r7g.xlarge  
4 vCPUs  
32 GiB RAM  
400 GiB  
1.946 USD/hour

☐ Dev/Test  
db.r7g.large  
2 vCPUs  
16 GiB RAM  
200 GiB  
0.278 USD/hour

☒ Free tier  
db.t4g.micro  
2 vCPUs  
1 GiB RAM  
20 GiB  
0.019 USD/hour

## DB instance identifier

Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.

strugmac-DB

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

## Master username

Type a login ID for the master user of your DB instance.

admin

1 to 16 alphanumeric characters. The first character must be a letter.

## Credentials management

You can use AWS Secrets Manager or manage your master user credentials.

☐ Managed in AWS Secrets Manager - **most secure**  
RDS generates a password for you and manages it throughout its lifecycle using AWS Secrets Manager.

☒ Self managed  
Create your own password or have RDS create a password that you manage.

## Auto generate password

Amazon RDS can generate a password for you, or you can specify your own password.

## Master password

\*\*\*\*\*

## Password strength

Very strong

Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / ' " @

## Confirm master password

\*\*\*\*\*

## ▼ View default settings for Easy create

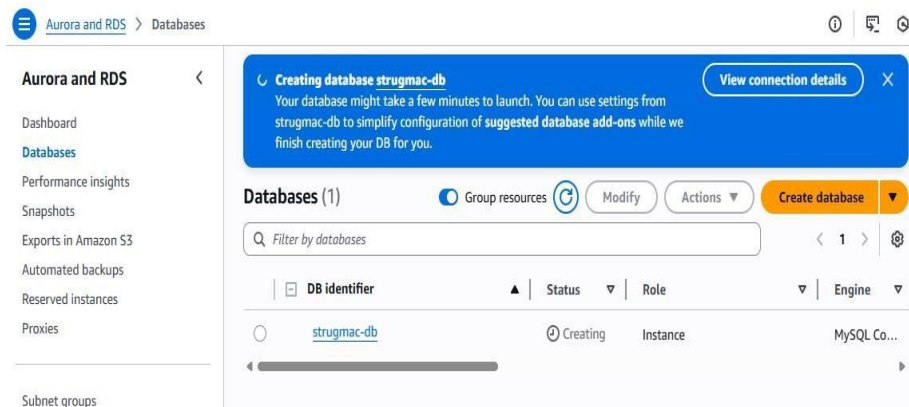
Easy create sets the following configurations to their default values, some of which can be changed later. If you want to change any of these settings now, use Standard create.

Configuration	Value	Editable after database is created
Encryption	Enabled	No
VPC	Default VPC (vpc-081fe9fe127bb8e79)	No
Multi-AZ	No	Yes
Option group	default:mysql-8-0	Yes
Subnet group	Create new DB Subnet Group	Yes
Automatic backups	Enabled	Yes
VPC security group	default	Yes
Publicly accessible	No	Yes
Database port	3306	Yes
DB instance identifier	strugmac-DB	Yes
DB engine version	8.0.42	Yes
DB parameter group	default.mysql8.0	Yes
Monitoring type	Database Insights - Standard	Yes
Performance insights	Not enabled	Yes
Monitoring	Enabled	Yes
Maintenance	Auto minor version upgrade enabled	Yes



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6. NOW THIS WILL CREATE A MYSQL DATABASE TO ME, AND WE WANT TO CONNECT TO RDS FOR WHICH WE HAVE TO LAUNCH A SERVER WHICH BASICALLY WILL HAVE MYSQL CLIENT INSTALLED INSIDE IT. FOR THAT WE HAVE TO LAUNCH AN EC2 INSTANCE,
7. LAUNCHING AN EC2 INSTANCE



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The screenshot displays the AWS Management Console interface. At the top, the header includes the AWS logo, a search bar, and account information for 'Europe (Stockholm)' with Account ID: 5407-1396-0939. The main navigation pane on the left shows 'Console Home' and 'All services'. The 'All services' section lists various AWS services by category, including Compute (EC2, Lightsail, Lambda, etc.), Machine Learning, and Containers. The 'EC2' service is highlighted, leading to the 'EC2 Instances' page. This page features a sidebar with navigation options like 'Dashboard', 'AWS Global View', 'Events', 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', and 'Capacity Reservations'. The main content area is titled 'Instances' and includes a search bar, filters for 'Instance state' and 'Actions', and a table of instances. A red box highlights the 'Launch instances' button in the 'Actions' dropdown. Below the table, a message states 'No instances. You do not have any instances in this region.' and a 'Launch instances' button is provided.

**Services by category**

- Compute**
  - EC2
  - Lightsail
  - Lambda
  - Batch
  - Elastic Beanstalk
  - Serverless Application Repository
  - AWS Outposts
  - EC2 Image Builder
  - AWS App Runner
  - AWS SimSpace Weaver
  - Parallel Computing Service
  - AWS Global View
- Containers**
- Machine Learning**
  - Amazon SageMaker AI
  - Amazon Augmented AI
  - Amazon CodeGuru
  - Amazon DevOps Guru
  - Amazon Comprehend
  - Amazon Forecast
  - Amazon Fraud Detector
  - Amazon Kendra
  - Amazon Personalize
  - Amazon Polly
  - Amazon Rekognition
  - Amazon Textract
  - Amazon Transcribe
  - Amazon Translate

**Benefits and features**

**EC2 offers ultimate scalability and control**

Fully resizable compute capacity to support virtually any workload. This service is best if you want:

- Highest level of control of the entire technology stack, allowing full integration with all AWS services
- Widest variety of server size options
- Widest availability of operating systems to choose from including Linux, Windows, and macOS
- Global scalability

[Find out more about EC2](#)

**Launch a virtual server**

[Launch instance](#)

[View dashboard](#)

[Get started walkthroughs](#)

[Get started tutorial](#)

**Additional actions**

[View running instances](#)

[Migrate a server](#)

**Instances**

[Find Instance by attribute or tag \(case-sensitive\)](#)

[All states](#)

Name	Instance ID	Instance state	Instance type	Status check
No instances				

You do not have any instances in this region

[Launch instances](#)

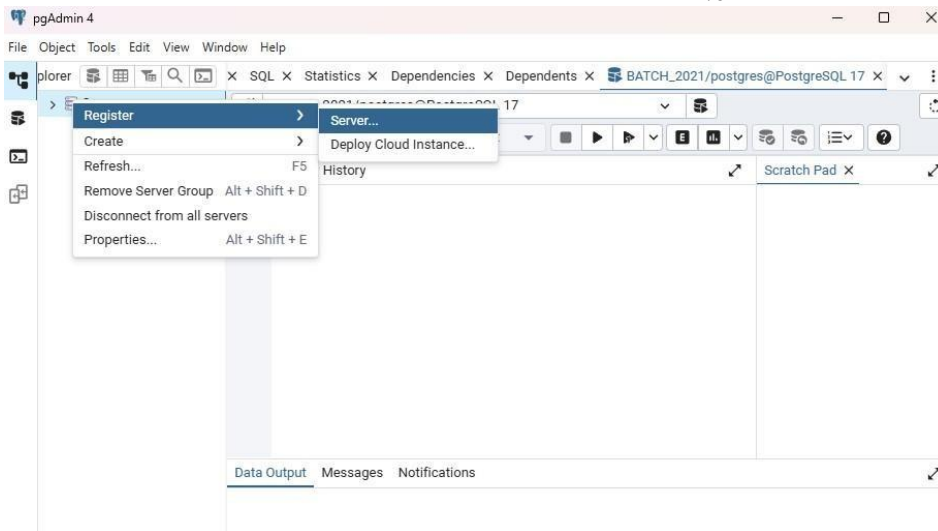


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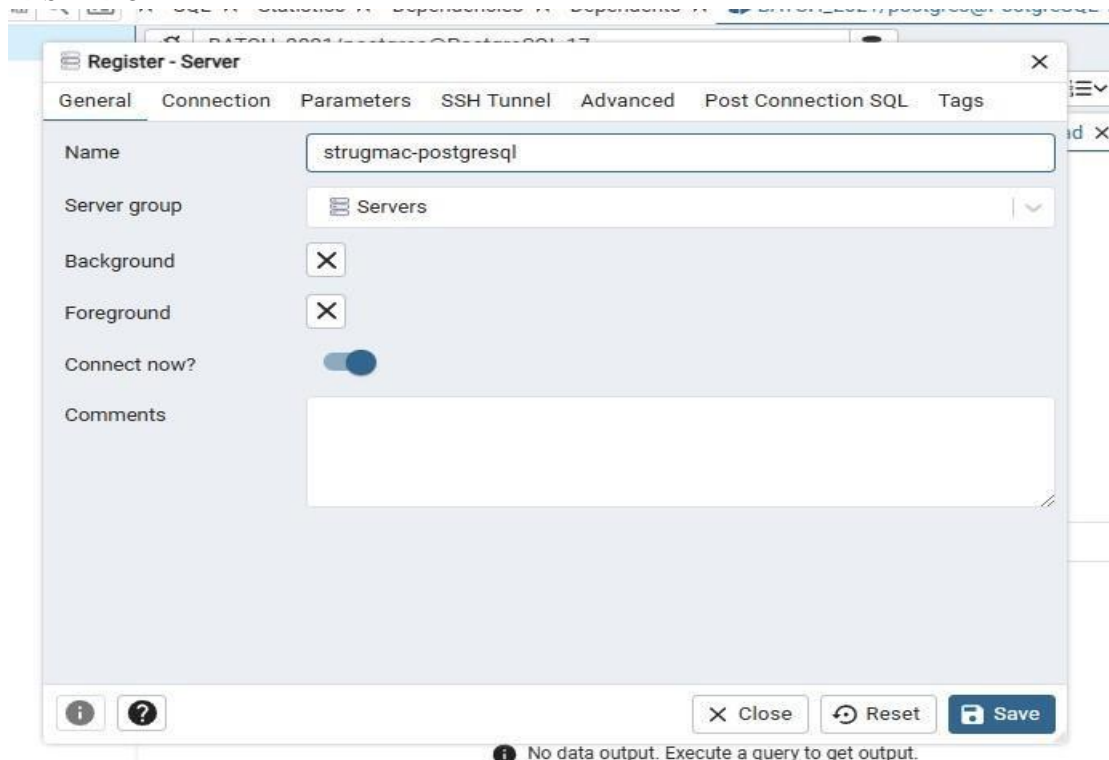
OTHER OPTION IS THAT WE CAN CONNECT THE POSTGRES AWS RDS TO OUR LOCAL MACHINE.

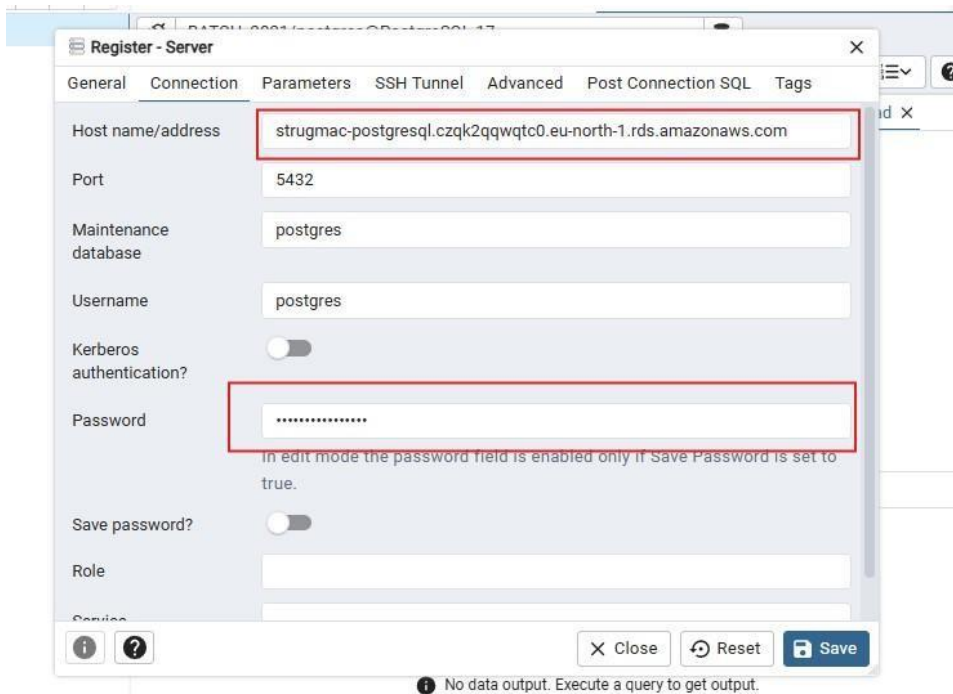
## 1. CREATE AWS RDS DATABASE FOR POSTGRESSQL



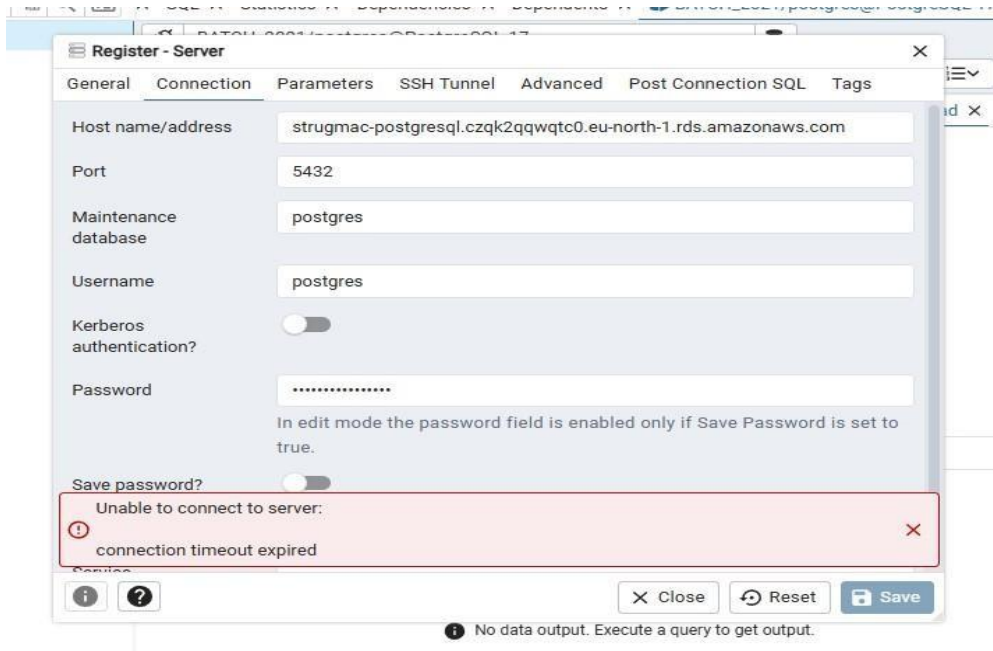
## 2. CONNECT FROM PGADMIN.

## 3. COPY THE API ENDPOINTS FROM THE DASHBOARD OF AWS RDS DATABASE INSTANCE.





#### 4. CLICK ON SAVE



#### 5. MIGHT GIVE THIS ERROR AS THIS DB INSTANCE IS NOT AVAILABLE LOCALLY.

#### 6. CHANGE THE INBOUND RULES OF DB INSTANCE FROM THE AWS CONSOLE





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## Connectivity & security

### Endpoint & port

#### Endpoint

strugmac-postgresq  
l.czqk2qqwqt0.eu-north  
-1.rds.amazonaws.com

#### Port

5432

### Networking

#### Availability Zone

eu-north-1c

#### VPC

vpc-081fe9fe127bb8e79

#### Subnet group

default-vpc-  
081fe9fe127bb8e79

#### Subnets

subnet-  
00bf0147db6493492  
subnet-  
0aa3f608f07d8cecc  
subnet-  
0f9ee2b6eb9698f78

### Security

#### VPC security groups

default (sg-  
0e67db7abaff84225)  
Active

#### Publicly accessible

No

#### Certificate authority

Info  
rds-ca-rsa2048-g1

#### Certificate authority date

May 25, 2061, 03:29  
(UTC+05:30)

## Edit inbound rules

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

### Inbound rules

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-0d9f21030174e69aa	All traffic	All	All	C...	
-	PostgreSQL	TCP	5432	M... sg-0e67db7abaff84225 223.181.100.173/32	

Add rule

Cancel

Preview changes

Save rules