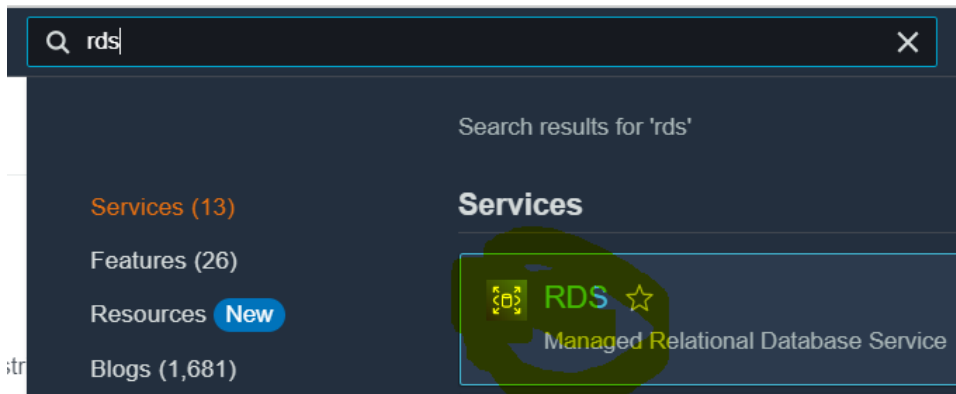




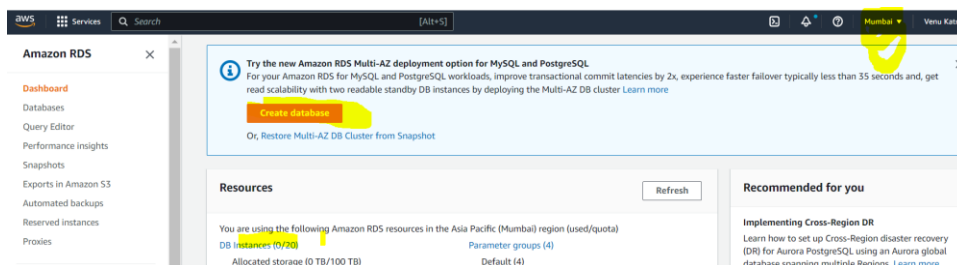
## AWS RDS documents

IN this document explaining how to create Mysql, Mssql, databases using AWS RDS service.

RDS used to create different databses like mysql, mssql, oracle, but oracle, arora db paid remaining databases free tier available (one year no need to pay any bill)



First go to aws serch box and type rds



Click on ..

## Create database

### Choose a database creation method [Info](#)

☒ **Standard create**

You set all of the configuration options, including ones for availability, security, backups, and maintenance.

☐ **Easy create**

Use recommended best-practice configurations. Some configuration options can be changed after the database is created.

### Engine options

#### Engine type [Info](#)

☐ Amazon Aurora



☒ MySQL



☐ MariaDB



☐ PostgreSQL



☐ Oracle



☐ Microsoft SQL Server



Must choose Free tier only (otherwise u ll get bill)

### Templates

Choose a sample template to meet your use case.

☐ **Production**

Use defaults for high availability and fast, consistent performance.

☐ **Dev/Test**

This instance is intended for development use outside of a production environment.

☒ **Free tier**

Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS. [Info](#)

### Availability and durability

#### Deployment options [Info](#)

The deployment options below are limited to those supported by the engine you selected above.

☐ **Multi-AZ DB Cluster - new**

Creates a DB cluster with a primary DB instance and two readable standby DB instances, with each DB instance in a different Availability Zone (AZ). Provides high availability, data redundancy and increases capacity to serve read workloads.

☐ **Multi-AZ DB instance (not supported for Multi-AZ DB cluster snapshot)**

Creates a primary DB instance and a standby DB instance in a different AZ. Provides high availability and data redundancy, but the standby DB instance doesn't support connections for read workloads.

☐ **Single DB instance (not supported for Multi-AZ DB cluster snapshot)**

Creates a single DB instance with no standby DB instances.

## Settings

### DB instance identifier [Info](#)

Type a name for your DB instance. The name must be unique across all DB instances owned by Region.

mysqlslatabase

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstanc characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens

### ▼ Credentials Settings

#### Master username [Info](#)

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

myuser

1 to 16 alphanumeric characters. First character must be a letter.

☐ **Manage master credentials in AWS Secrets Manager**

Manage master user credentials in Secrets Manager. RDS can generate a password for you manage it throughout its lifecycle.

☐ **Auto generate a password**

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

#### Master password [Info](#)

.....

Constraints: At least 8 printable ASCII characters. Can't contain any of the following: / (slash), (at sign).

#### Confirm master password [Info](#)

.....

## Instance configuration

The DB instance configuration options below are limited to those supported



### Amazon RDS Optimized Writes - *new* [Info](#)



Show instance classes that support Amazon RDS C

DB instance class [Info](#)

- ☐ Standard classes (includes m classes)
- ☐ Memory optimized classes (includes r and x classes)
- ☒ Burstable classes (includes t classes)

db.t3.micro

2 vCPUs

1 GiB RAM

Network: 2,085 Mbps



Include previous generation classes

## Storage

Storage type [Info](#)

General Purpose SSD (gp2)

## Storage

Storage type [Info](#)

General Purpose SSD (gp2)

Baseline performance determined by volume size

Allocated storage

20

The minimum value is 20 GiB and the maximum value is 6,144 GiB

Storage autoscaling [Info](#)

Provides dynamic scaling support for your database's storage based on

☒ Enable storage autoscaling

Enabling this feature will allow the storage to increase after the space is exceeded.

Maximum storage threshold [Info](#)

Charges will apply when your database autoscales to the specified threshold

1000

The minimum value is 22 GiB and the maximum value is 6,144 GiB

Public access must be yes, otherwise you're unable to access from your local system.

Public access [Info](#)

☒ Yes

RDS assigns a public IP address to the database instance. Resources inside the VPC which resources can connect to the database instance.

☐ No

RDS doesn't assign a public IP address to the database instance. Choose one or more VPC security groups to connect to your database. Choose one or more VPC security groups to connect to your database.

VPC security group (firewall) [Info](#)

Choose one or more VPC security groups to restrict appropriate incoming traffic.

### ▼ Additional configuration

Database options, encryption turned on, backup turned off, backtrack turned off, maintenance, CloudWatch Logs protection turned off.

### Database options

Initial database name [Info](#)

mysqlldb

If you do not specify a database name, Amazon RDS does not create a database.

DB parameter group [Info](#)

default.mysql8.0

Option group [Info](#)

default:mysql-8-0

### Backup

☒ Enable automated backups

Creates a point-in-time snapshot of your database

Un check backup... otherwise yu will get bill

### Estimated monthly costs

The Amazon RDS Free Tier is available to you for 12 months. Each calendar month, the free tier will allow you to use the Amazon RDS resources listed below for free:

- 750 hrs of Amazon RDS in a Single-AZ db.t2.micro, db.t3.micro or db.t4g.micro Instance.
- 20 GB of General Purpose Storage (SSD).
- 20 GB for automated backup storage and any user-initiated DB Snapshots.

[Learn more about AWS Free Tier.](#)

When your free usage expires or if your application use exceeds the free usage tiers, you simply pay standard, pay-as-you-go service rates as described in the [Amazon RDS Pricing page.](#)

**i** You are responsible for ensuring that you have all of the necessary rights for any third-party products or services that you use with AWS services.

Cancel

Create database

If u get like above there is no any bill.

Databases

Group resources

Modify

Actions

Restore from S3

Create database

Filter by databases

<

1

>

DB identifier

Role

Engine

Region & AZ

Size

Status

CPU

Current act

mysqlslabase

Instance

MySQL Community

-

db.t3.micro

Creating

-

RDS > Databases > mysqlslatabase

## mysqlslatabase

Modify A

### Summary

DB identifier mysqlslatabase	CPU 2.36%	Status Available	Class db.t3.micro
Role Instance	Current activity 0 Connections	Engine MySQL Community	Region & AZ ap-south-1c

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

### Connectivity & security

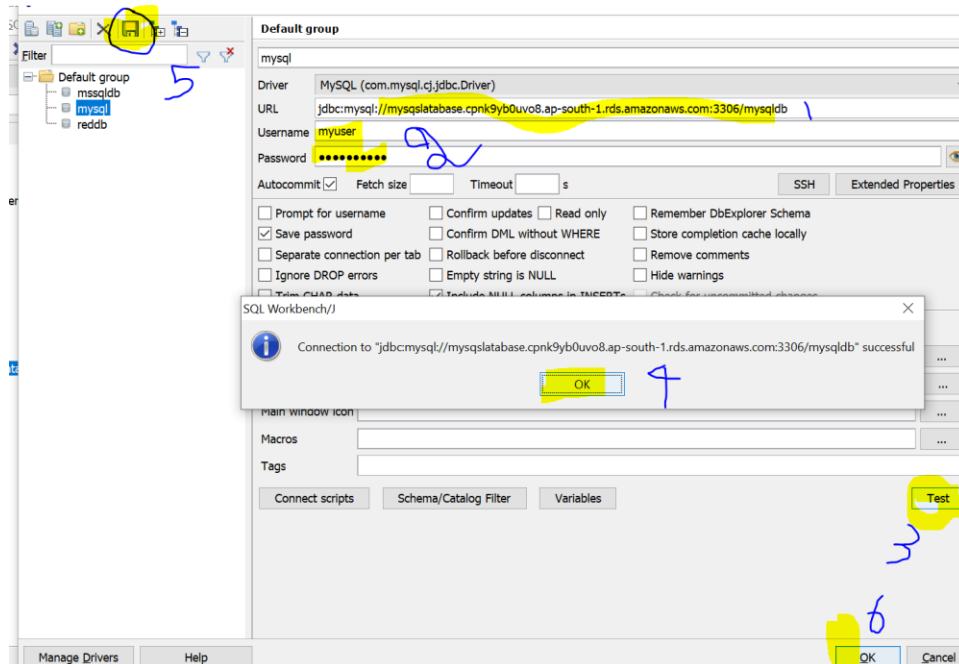
<b>Endpoint &amp; port</b> Endpoint mysqlslatabase.cpnk9yb0uvo8.ap-south-1.rds.amazonaws.com Port 3306	<b>Networking</b> Availability Zone ap-south-1c VPC vpc-c9e408a2	<b>Security</b> VPC security groups default (sg-287b264f) Active Publicly accessible Yes
--	--	---

You will get database name you ll get from **configuration** tab

Connectivity & security | Monitoring | Logs & events | **Configuration** | Maintenance & backups

## Instance

<h3>Configuration</h3> <p>DB instance ID mysqlslatabase</p> <p>Engine version 8.0.30</p> <p>DB name mysqlldb</p> <p>License model General Public License</p> <p>Option groups default:mysql-8-0 <span>✓ In sync</span></p> <p>Amazon Resource Name (ARN) arn:aws:rds:ap-south-1:609752856962:db:mysqlslatabase</p>	<h3>Instance class</h3> <p>Instance class db.t3.micro</p> <p>vCPU 2</p> <p>RAM 1 GB</p> <h3>Availability</h3> <p>Master username myuser</p> <p>IAM DB authentication Not enabled</p> <p>Multi-AZ</p>
--	--



**Hostname:** jdbc:mysql://mysqlslatabase.cpnk9yb0uvo8.ap-south-1.rds.amazonaws.com:3306/mysql

**Username:** myuser

**Password:** mypassword

How to connect sql workbench follow this video [Connect Oracle Mysql Mssql using sqlWorkbench AWS RDS connect](https://www.youtube.com/watch?v=-l2dGGDMUnU) or <https://www.youtube.com/watch?v=-l2dGGDMUnU>



## Connect Different databases using SqlWorkbench

Call: +91-8500002025



Pls download this driver folder place in bigdata folder

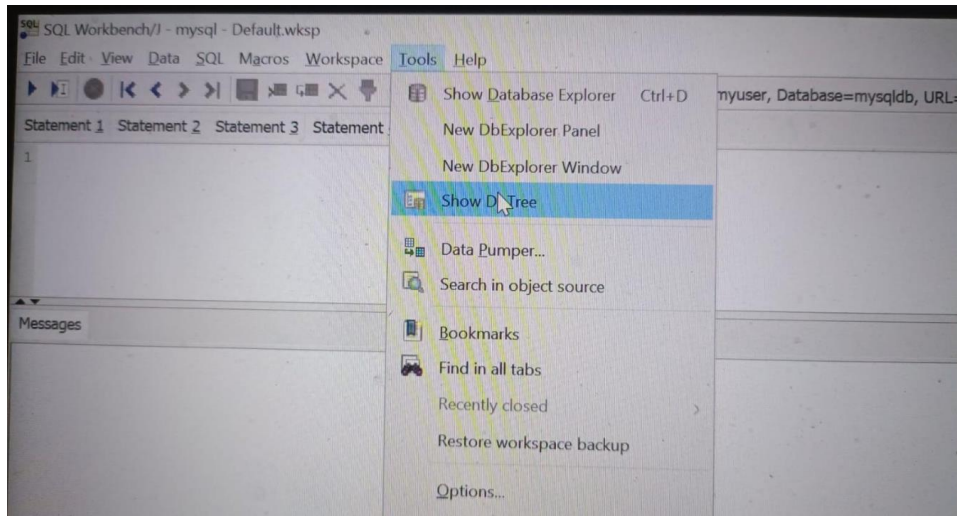
[https://drive.google.com/drive/folders/1R26gs\\_ekebuwIEHEne96-dnFNiCXcadv?usp=share\\_link](https://drive.google.com/drive/folders/1R26gs_ekebuwIEHEne96-dnFNiCXcadv?usp=share_link)

For more details

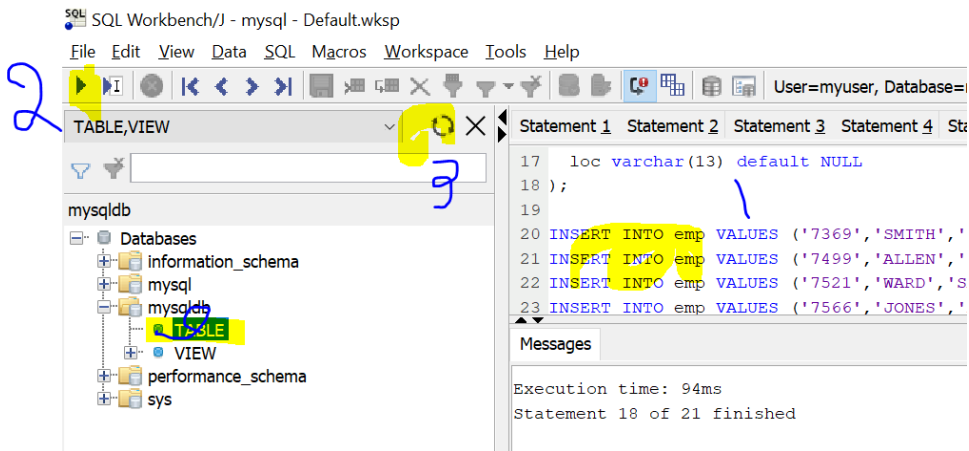
It will take little time to create max 5 minutes...

To connect this database you must have different tools using Sql workbench or dbViewer

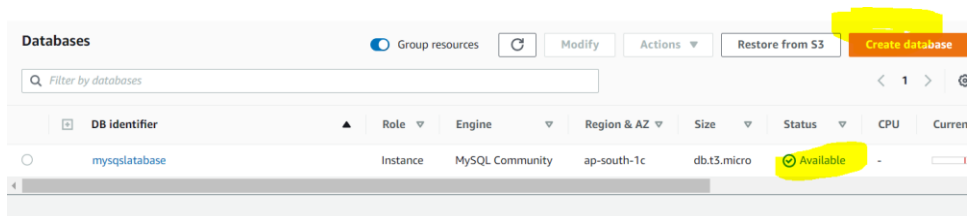
Please follow this video to configure



<https://justinsomnia.org/2009/04/the-emp-and-dept-tables-for-mysql/>



Now create MSSQL database




Must choose **Easy create** only


☐ Standard create  
You set all of the configuration options, including ones for availability, security, backups, and maintenance.


☒ Easy create  
Use recommended best-practice configurations. Some configuration options can be changed after the database is created.


### Configuration


Engine type [Info](#)


☐ Amazon Aurora  


☐ MySQL  


☐ MariaDB  


☐ PostgreSQL  


☐ Oracle  


☒ Microsoft SQL Server  


DB instance size

☐ Production  
db.r5.xlarge  
4 vCPUs  
32 GiB RAM

☐ Dev/Test  
db.m5.large  
2 vCPUs  
8 GiB RAM

☒ Free tier  
db.t2.micro  
1 vCPUs  
1 GiB RAM

Now create mssql database using these credentials

## Settings

**DB instance identifier** [Info](#)  
Type a name for your DB instance. The name must be unique across all DB instances owned by you in this Region.

mssqldbbase

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). It can contain only lowercase letters, numbers, and hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

▼ **Credentials Settings**

**Master username** [Info](#)  
Type a login ID for the master user of your DB instance.

msuser

1 to 16 alphanumeric characters. First character must be a letter.

☐ **Manage master credentials in AWS Secrets Manager**  
Manage master user credentials in Secrets Manager. RDS can generate a password for you and manage it throughout its lifecycle.

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

**Master password** [Info](#)

.....

Constraints: At least 8 printable ASCII characters. Can't contain any of the following: / (slash), ' (single quote), ' (double quote), ' (at sign).

**Confirm master password** [Info](#)

.....

Like mysql if u want to modify everything in freetire is not possible not recommended.

**Confirm master password** [Info](#)

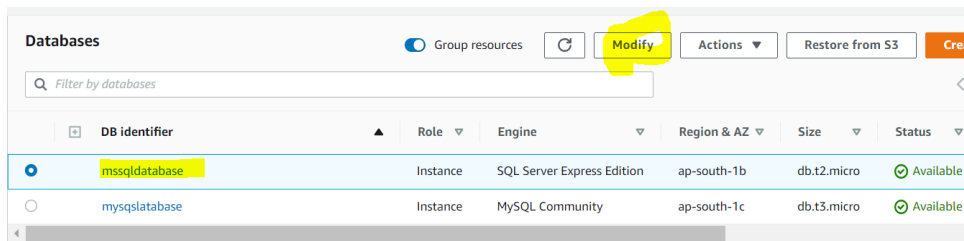
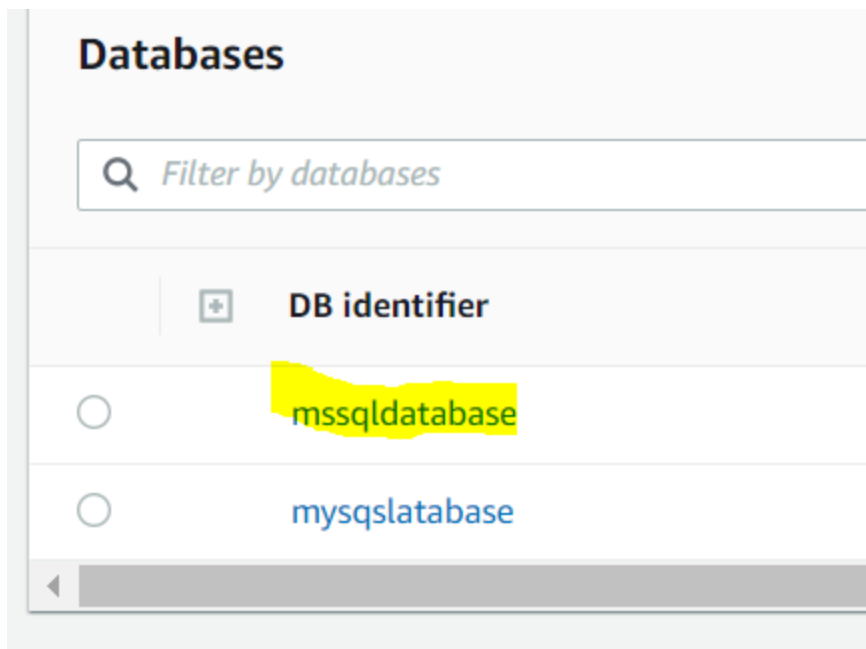
.....

► **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](#).

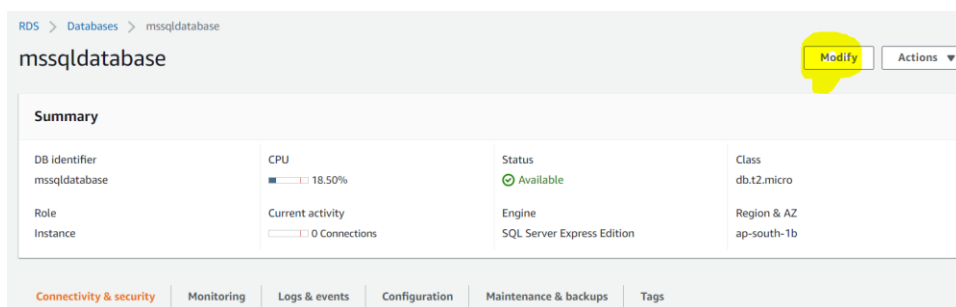
**ⓘ You are responsible for ensuring that you have all of the necessary rights for any third-party products or services that you use with AWS services.**

Cancel **Create database**

Usually it will take 15 minutes to create database.



Pls go to moidfy ...



Connectivity & security	Monitoring	Logs & events	Configuration	Maintenance & backu
<b>Connectivity &amp; security</b>				
<b>Endpoint &amp; port</b>  Endpoint database-1.ce3q5qetohmt.ap-south-1.rds.amazonaws.com  Port 1433	<b>Networking</b>  Availability Zone ap-south-1b  VPC vpc-056d932e69c349722  Subnet group default-vpc-056d932e69c349722  Subnets	<b>Security</b>  VPC security groups default (sg-0b0bcb69cf224e03e) Active  Publicly accessible No  Certificate authority <a href="#">Info</a> rds-ca-2019		

Next scroll down click on Additional configuration Must choose public accessible otherwise ur unable to connect

Certificate authority [Info](#)  
Using a server certificate provides an extra layer of security by validating that the connection is being made to an Amazon database. It does so by checking the server certificate that is automatically installed on all databases that you provision.

rds-ca-2019

▼ **Additional configuration**

Public access

☒ Publicly accessible  
RDS assigns a public IP address to the database. Amazon EC2 instances and other resources outside of the VPC can connect to your database. Resources inside the VPC can also connect to the database. Choose one or more VPC security groups that specify which resources can connect to the database.

☐ Not publicly accessible  
No IP address is assigned to the DB instance. EC2 instances and devices outside the VPC can't connect.

Database port  
Specify the TCP/IP port that the DB instance will use for application connections. The application connection string must specify the port number. The DB security group and your firewall must allow connections to the port. [Learn more](#)

1433

If public access is No, ur unable to connect database so change to yes

## ▼ Additional configuration

Database options, backup turned on, Performance Insights turned off, Enhanced CloudWatch Logs, delete protection turned off

### Database options

DB parameter group [Info](#)

default.sqlserver-ex-14.0

Option group [Info](#)

default:sqlserver-ex-14-00

### Backup

☒ **Enable automated backups**  
Creates a point-in-time snapshot of your database

Backup retention period [Info](#)

The number of days (1-35) for which automatic backups are kept.

7 ▼ days

Backup window [Info](#)

If u take back up for every 7 days ull get bill so change to 0 (means no backup)

### Backup

☒ **Enable automated backups**  
Creates a point-in-time snapshot of your database

Backup retention period [Info](#)

The number of days (1-35) for which automatic backups are kept.

0 ▼ days

## Modify DB instance: mssqldbatabase

### Summary of modifications

You are about to submit the following modifications. Only values that will change are displayed. Carefully verify your changes and click Modify DB Instance.

Attribute	Current value	New value
Backup retention period	7	0
Enable Enhanced monitoring	Yes	No

### Schedule modifications

When to apply modifications

☐ Apply during the next scheduled maintenance window

Current maintenance window: December 31, 2022 16:16 - 16:46 UTC+5.5

☒ Apply immediately

The modifications in this request and any pending modifications will be asynchronously applied as soon as possible, regardless of the maintenance window setting for this database instance.

Cancel

Back

Modify DB instance

If u choose apply immediately it's reflected immediately, otherwise it ll take to reflect little tile (TTL) to apply ur settings.

Now connect

## Modify DB instance: mssqldbatabase

### Summary of modifications

You are about to submit the following modifications. Only values that will change are displayed. Carefully verify your changes and click Modify DB Instance.

Attribute	Current value	New value
Backup retention period	7	0
Enable Enhanced monitoring	Yes	No

### Schedule modifications

When to apply modifications

☐ Apply during the next scheduled maintenance window

Current maintenance window: December 31, 2022 16:16 - 16:46 UTC+5.5

☒ Apply immediately

The modifications in this request and any pending modifications will be asynchronously applied as soon as possible, regardless of the maintenance window setting for this database instance.

Cancel

Back

Modify DB instance



## Summary

DB identifier  
mssqldatabase

CPU  
 29.00%

Status  
⌚ Modifying

Role  
Instance

Current activity  
 0 Connections

Engine  
SQL Server Express Edition

Connectivity & security

Monitoring

Logs & events

Configuration

Maintenance & backups

Tags

## Connectivity & security

### Endpoint & port

Endpoint  
mssqldatabase.cpnk9yb0uvo8.ap-south-1.rds.amazonaws.com

Port  
1433

### Networking

Availability Zone  
ap-south-1b

VPC  
vpc-c9e408a2

Subnet group  
default

### Security

VPC security groups  
default (sg-287b264f)  
🟢 Active

Publicly accessible  
Yes

Certificate authority [Info](#)

## Security Groups (1/1) [Info](#)

🔍 Filter security groups

search: sg-287b264f ✕

Clear filters

<input checked="" type="checkbox"/>	Name	Security group ID	Security group
<input checked="" type="checkbox"/>	—	sg-287b264f	default

Inbound rules

Outbound rules

Tags

📘 You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer ✕

Inbound rules (6)

🔍 Filter security group rules

🔄

Manage tags

Edit inbound rules

< 1 > ⚙️

**Inbound rules**

Security group rule ID	Protocol	Port range	Source	Description - optional
sgr-0a7e16f8d5f3ac46	TCP	5459	Custom	0.0.0.0/0
sgr-0103aaf1a013fa12b	TCP	22	Custom	0.0.0.0/0
sgr-077bb3cf50fb757b	TCP	1521	Custom	0.0.0.0/0
sgr-01f3dc7ec4c7682ac	All	All	Custom	sg-287b264f
sgr-0fb9b76c4a532256	TCP	0 - 65535	Custom	0.0.0.0/0
-	TCP	0	Custom	0.0.0.0/0

**Add rule**

Protocol: MySQL/Aurora, Port range: 3306, Source: Anywh..., Description: 0.0.0.0/0

**Add rule**

Cancel Preview changes **Save rules**

**Inbound rules**

Security group rule ID	Protocol	Port range	Source	Description - optional
sgr-077bb3cf50fb757b	TCP	1521	Custom	0.0.0.0/0
sgr-01f3dc7ec4c7682ac	All	All	Custom	sg-287b264f
sgr-0fb9b76c4a532256	TCP	0 - 65535	Custom	0.0.0.0/0
-	TCP	3306	Anywh...	0.0.0.0/0
-	TCP	3306	Anywh...	0.0.0.0/0
-	TCP	3306	Anywh...	0.0.0.0/0

**Add rule**

Protocol: MySQL/Aurora, Port range: 3306, Source: Anywh..., Description: 0.0.0.0/0

Cancel Preview changes **Save rules**

Mysql and mssql ports add in group that only u can access

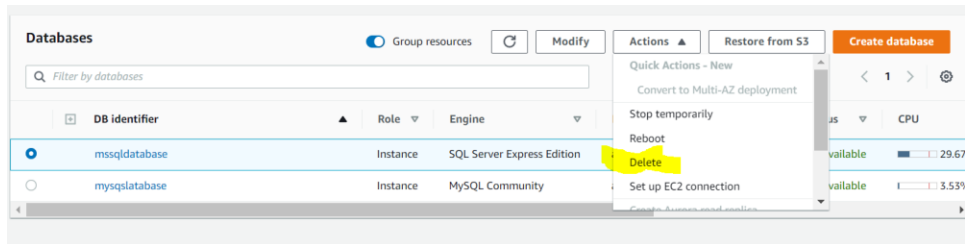
If you are unable to connect use that... in 7 th page first pic shows how to connect.

**Usually 2 reasons to unable to connect 1) public accessable ..no (change to yes) 2) security group mysql (0.0.0.0/0)**

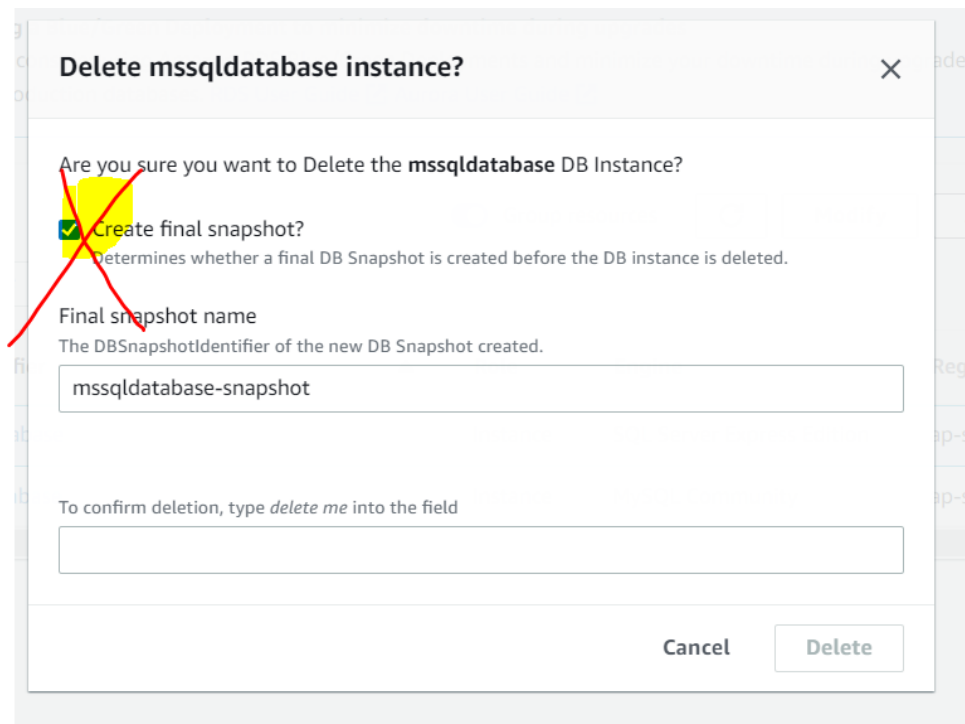
Usually if u maintain multiple databases u ll get bill in future

So it's recommended to terminate one instance and maintain one database only.

Like this



If u take final snapshot u ll get bill. So uncheck that..



Delete mssqldatabase instance?

Are you sure you want to Delete the **mssqldatabase** DB Instance?

☐ Create final snapshot?

Determines whether a final DB Snapshot is created before the DB instance is deleted.

☒ I acknowledge that upon instance deletion, automated backups, including system snapshots and point-in-time recovery, will no longer be available.

To confirm deletion, type *delete me* into the field

delete me

We strongly recommend taking a final snapshot before instance deletion since after your instance is deleted, automated backups will no longer be available.

Cancel

Delete

Please check snapshots if u have any snapshots please delete that snapshots otherwise you will get bill.

Amazon RDS

Dashboard

Databases

Query Editor

Performance insights

Snapshots

Exports in Amazon S3

Automated backups

Reserved instances

Proxies

Subnet groups

Parameter groups

Option groups

Custom engine versions

Successfully deleted DB instance **mssqslatabase**

Successfully deleted DB instance **mssqldatabase**

RDS > Snapshots

Snapshots

Manual

Automated

Shared with me

Public

Backup se

Manual snapshots (0)

Q Filter by manual snapshots

Snapshot name

DB inst

If u have snapshots like this pls terminate it

Amazon RDS

- Dashboard
- Databases
- Query Editor
- Performance insights
- Snapshots**
- Exports in Amazon S3
- Automated backups
- Reserved instances
- Proxies

Subnet groups

Parameter groups

Option groups

Custom engine versions

Events

Event subscriptions

Successfully modified instance **pysparkpoc**

Successfully deleted DB instance **sparkpoc**

Deleting DB instance **pysparkpoc**

RDS > Snapshots

### Snapshots

Manual Automated Shared with me Public B...

Manual snapshots (1)

Filter by manual snapshots

<input type="checkbox"/>	Snapshot name	DB instance or cluster	Snapshot creation time	DB instance created time	Status
<input type="checkbox"/>	pysparkpoc-snapshot	pysparkpoc	January 26, 2023, 08:30 (UTC+05:30)	January 26, 2023, 07:51 (UTC+05:30)	Available

Pls terminate otherwise u ll get bill

RDS > Snapshots

### Snapshots

Manual Automated Shared with me Public Backup service Exports in Amazon S3

Manual snapshots (1)

Filter by manual snapshots

<input checked="" type="checkbox"/>	Snapshot name	DB instance or cluster	Snapshot creation time	DB instance created time	Status
<input checked="" type="checkbox"/>	pysparkpoc-snapshot	pysparkpoc	January 26, 2023, 08:30 (UTC+05:30)	January 26, 2023, 07:51 (UTC+05:30)	Available

Actions

- Restore snapshot
- Copy snapshot
- Share snapshot
- Migrate snapshot
- Delete snapshot

Take snapshot

1

So in future there is no any bill now. The main reason all snapshots deleted.

Amazon RDS

- Dashboard
- Databases
- Query Editor
- Performance insights
- Snapshots**
- Exports in Amazon S3
- Automated backups
- Reserved instances
- Proxies

Subnet groups

Parameter groups

Option groups

Custom engine versions

Successfully deleted snapshot **pysparkpoc-snapshot**

RDS > Snapshots

### Snapshots

Manual Automated Shared with me Public Backup service Exports in Amazon S3

Manual snapshots (0)

Filter by manual snapshots

<input type="checkbox"/>	Snapshot name	DB instance or cluster	Snapshot creation time	DB instance created time	Status
--------------------------	---------------	------------------------	------------------------	--------------------------	--------

No Snapshots found, you can take a snapshot using Take Snapshot