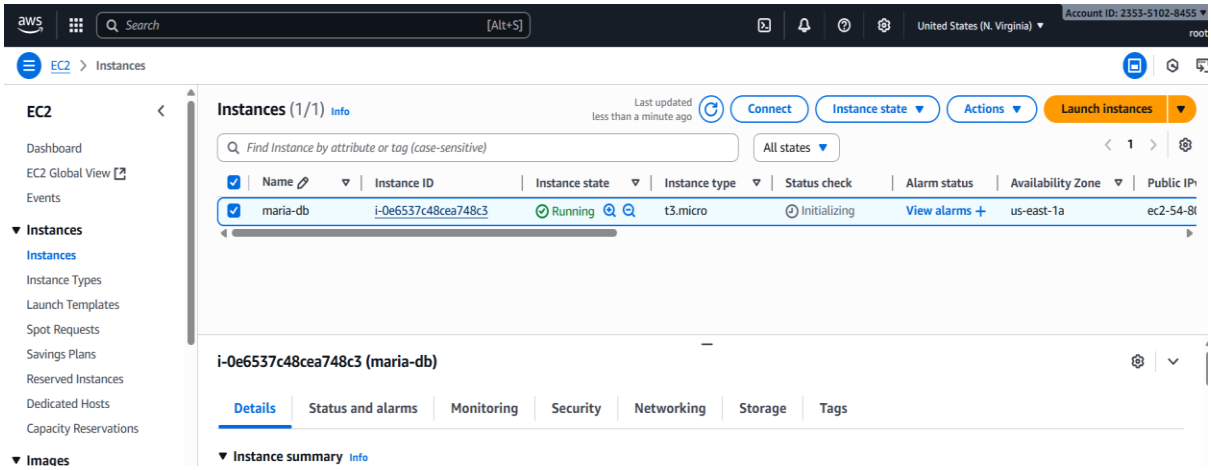
1. Create MariaDB DB on EC2.

Go to ec2 and create a instance.



Login to that instance and execute this commands:

Sudo su –

Yum install -y mariadb105-server

```
[ec2-user@ip-172-31-115-0 ~]$ sudo su -
[root@ip-172-31-115-0 ~]# yum install -y mariadb105-server
Amazon Linux 2023 Kernel Livepatch repository
Dependencies resolved.
================================================================================
 Package                                Architecture          Version
================================================================================
Installing:
 mariadb105-server                      x86_64                3:10.5.29-1.amzn2023
Installing dependencies:
 mariadb-connector-c                    x86_64                3.3.10-1.amzn2023.0.
 mariadb-connector-c-config             noarch                3.3.10-1.amzn2023.0.
 mariadb105                             x86_64                3:10.5.29-1.amzn2023
 mariadb105-common                      x86_64                3:10.5.29-1.amzn2023
 mariadb105-errmsg                      x86_64                3:10.5.29-1.amzn2023
 mysql-selinux                          noarch                1.0.4-2.amzn2023.0.3
 perl-B                                 x86_64                1.80-477.amzn2023.0.
 perl-DBD-MariaDB                       x86_64                1.22-1.amzn2023.0.4
 perl-DBI                               x86_64                1.643-7.amzn2023.0.3
 perl-Data-Dumper                       x86_64                2.174-460.amzn2023.0
 perl-File-Copy                         noarch                2.34-477.amzn2023.0.
 perl-FileHandle                        noarch                2.03-477.amzn2023.0.
 perl-Math-BigInt                       noarch                1:1.9998.39-2.amzn20
 perl-Math-BigRat                       noarch                0.2624-500.amzn2023.
 perl-Math-Complex                      noarch                1.59-477.amzn2023.0.
 perl-Sys-Hostname                      x86_64                1.23-477.amzn2023.0.
```

Systemctl enable mariadb

Systemctl start mariadb

Systemctl status mariadb

```
[root@ip-172-31-115-0 ~]# systemctl enable mariadb
Created symlink /etc/systemd/system/mysql.service → /usr/lib/systemd/system/mariadb.s
Created symlink /etc/systemd/system/mysqld.service → /usr/lib/systemd/system/mariadb.
Created symlink /etc/systemd/system/multi-user.target.wants/mariadb.service → /usr/li
[root@ip-172-31-115-0 ~]# systemctl start mariadb
[root@ip-172-31-115-0 ~]# systemctl status mariadb
● mariadb.service - MariaDB 10.5 database server
     Loaded: loaded (/usr/lib/systemd/system/mariadb.service; enabled; preset: disabl
     Active: active (running) since Mon 2025-10-13 06:39:24 UTC; 13s ago
       Docs: man:mariadbd(8)
             https://mariadb.com/kb/en/library/systemd/
    Process: 26560 ExecStartPre=/usr/libexec/mariadb-check-socket (code=exited, statu
    Process: 26582 ExecStartPre=/usr/libexec/mariadb-prepare-db-dir mariadb.service (
    Process: 26681 ExecStartPost=/usr/libexec/mariadb-check-upgrade (code=exited, sta
   Main PID: 26667 (mariadbd)
     Status: "Taking your SQL requests now..."
      Tasks: 13 (limit: 1053)
     Memory: 66.3M
        CPU: 507ms
     CGroup: /system.slice/mariadb.service
```

We can check mariadb running or not with the port number 3306.

```
[root@ip-172-31-115-0 ~]# lsof -i tcp:3306
COMMAND    PID  USER   FD   TYPE DEVICE SIZE/OFF NODE NAME
mariadbd 26667 mysql   19u  IPv6  44882      0t0  TCP *:mysql (LISTEN)
[root@ip-172-31-115-0 ~]#
```

2.Insert some dummy data.

Execute this commands to set dbname,dbpassword,dbrootpassword,dbuser.

```
[root@ip-172-31-115-0 ~]# DBNAME=mujaheeddb
[root@ip-172-31-115-0 ~]# DBPASSWORD=admin123456
[root@ip-172-31-115-0 ~]# DBROOTPASSWORD=admin123456
[root@ip-172-31-115-0 ~]# DBUSER=mujaheeddbuser
[root@ip-172-31-115-0 ~]#
```

Execute this commands to create database.

- echo "CREATE DATABASE ${DBName};" >> /tmp/db.setup

- echo "CREATE USER '${DBUser}' IDENTIFIED BY '${DBPassword}';" >> /tmp/db.setup
- echo "GRANT ALL PRIVILEGES ON *.* TO '${DBUser}'@'%';" >> /tmp/db.setup
- echo "FLUSH PRIVILEGES;" >> /tmp/db.setup
- mysqladmin -u root password "${DBRootPassword}"
- mysql -u root --password="${DBRootPassword}" < /tmp/db.setup
- rm /tmp/db.setup

```
[root@ip-172-31-115-0 ~]# echo "CREATE DATABASE ${DBName};" >> /tmp/db.setup
[root@ip-172-31-115-0 ~]# echo "CREATE USER '${DBUser}' IDENTIFIED BY '${DBPassword}';" >> /tmp/db.setup
[root@ip-172-31-115-0 ~]# echo "GRANT ALL PRIVILEGES ON *.* TO '${DBUser}'@'%';" >> /tmp/db.setup
[root@ip-172-31-115-0 ~]# echo "FLUSH PRIVILEGES;" >> /tmp/db.setup
[root@ip-172-31-115-0 ~]# mysqladmin -u root password "${DBRootPassword}"
[root@ip-172-31-115-0 ~]# mysql -u root --password="${DBRootPassword}" < /tmp/db.setup
```

Use this command to enter into db

mysql -u root --password="${DBRootPassword}"

```
[root@ip-172-31-115-0 ~]# mysql -u root --password="${DBRootPassword}"
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 16
Server version: 10.5.29-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

Show databases;

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mujaheeddb         |
| mysql              |
| performance_schema |
+--------------------+
4 rows in set (0.000 sec)
```

Use mujaheeddb;

Create table in that db create table table_name(id INT, name VARCHAR(50);

INSERT INTO table1 VALUES(1, 'Virat'), (2, 'Sachin'),

(3,'Dhoni'), (4,’ABD’);

Select*FROM table1;

```
MariaDB [(none)]> use mujaheeddb;
Database changed
MariaDB [mujaheeddb]> CREATE TABLE table1 (id INT, name VARCHAR(50));
Query OK, 0 rows affected (0.042 sec)

MariaDB [mujaheeddb]> INSERT INTO table1 VALUES(1, 'Virat'), (2, 'Sachin'), (3, 'Dhoni'), (4,
    -> 'ABD');
Query OK, 4 rows affected (0.001 sec)
Records: 4  Duplicates: 0  Warnings: 0

MariaDB [mujaheeddb]> select *FROM table1;
+------+--------+
| id   | name   |
+------+--------+
|    1 | Virat  |
|    2 | Sachin |
|    3 | Dhoni  |
|    4 | ABD    |
+------+--------+
4 rows in set (0.000 sec)
```

3.Take the backup of dummy data on EC2.

Use this command to backup

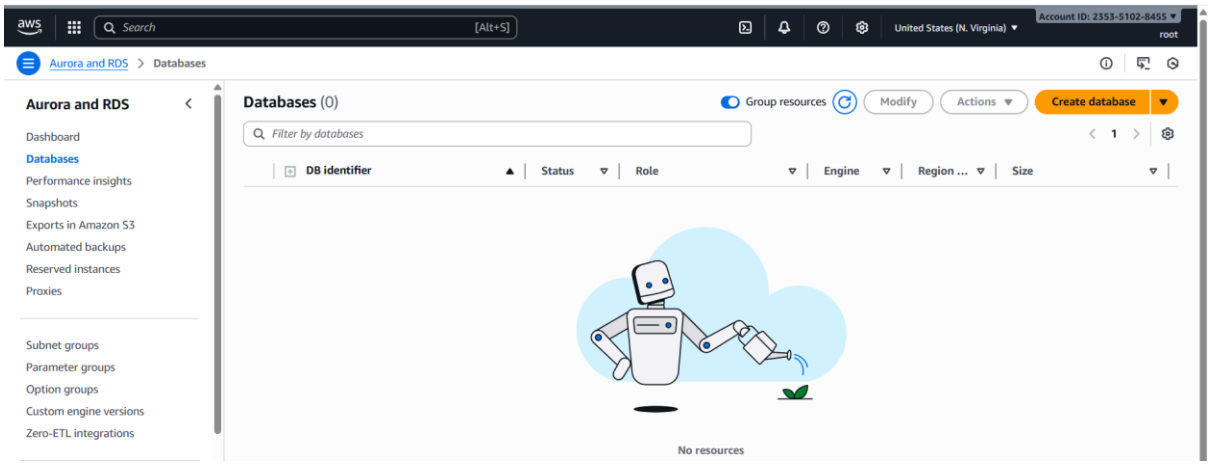
mysql dump -u root -p user_name > file_name.sql

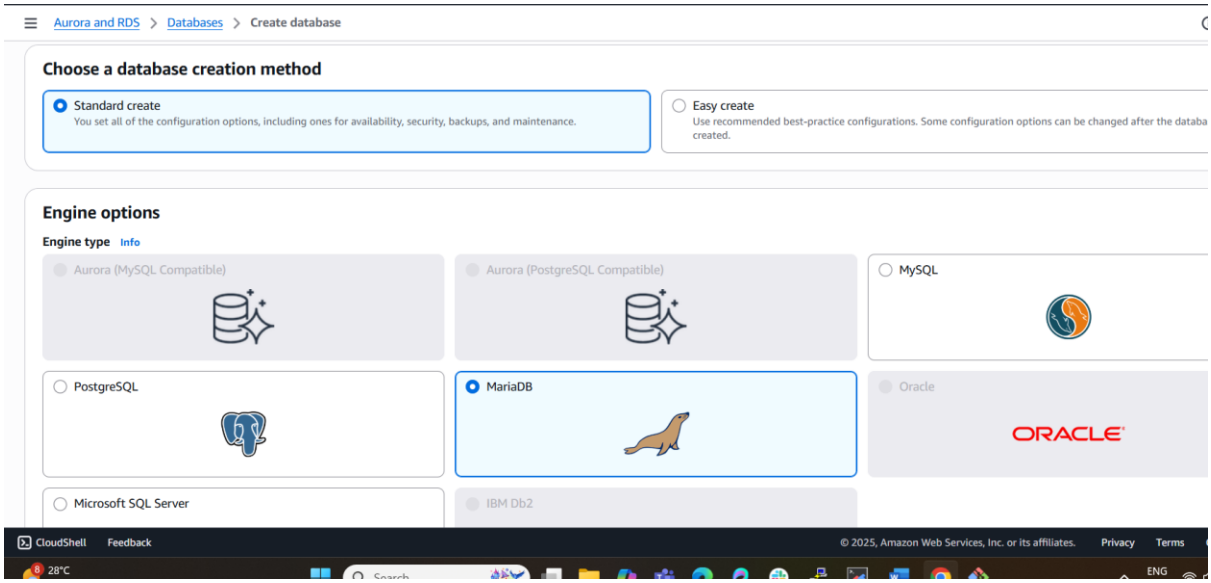
```
[root@ip-172-31-115-0 ~]# mysql dump -u root -p mujaheeddb > mariadb_data_backup.sql
[root@ip-172-31-115-0 ~]# cat mariadb_data_backup
cat: mariadb_data_backup: No such file or directory
[root@ip-172-31-115-0 ~]# cat mariadb_data_backup.sql
mysql  Ver 15.1 Distrib 10.5.29-MariaDB, for Linux (x86_64) using  EditLine wrapper
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Usage: mysql [OPTIONS] [database]

Default options are read from the following files in the given order:
/etc/my.cnf ~/.my.cnf
The following groups are read: mysql mariadb-client client client-server client-mariadb
The following options may be given as the first argument:
--print-defaults          Print the program argument list and exit.
--no-defaults             Don't read default options from any option file.
The following specify which files/extra groups are read (specified before remaining options):
--defaults-file=#         Only read default options from the given file #.
--defaults-extra-file=#   Read this file after the global files are read.
--defaults-group-suffix=# Additionally read default groups with # appended as a suffix.

  -?, --help          Display this help and exit.
  -I, --help          Synonym for -?
  --abort-source-on-error
                      Abort 'source filename' operations in case of errors
  --auto-rehash       Enable automatic rehashing. One doesn't need to use
                      'rehash' to get table and field completion, but startup
                      and reconnecting may take a longer time.
                      (Defaults to on; use --skip-auto-rehash to disable.)
  -A, --no-auto-rehash
                      No automatic rehashing. One has to use 'rehash' to get
                      table and field completion. This gives a quicker start of
                      mysql and disables rehashing on reconnect.
```

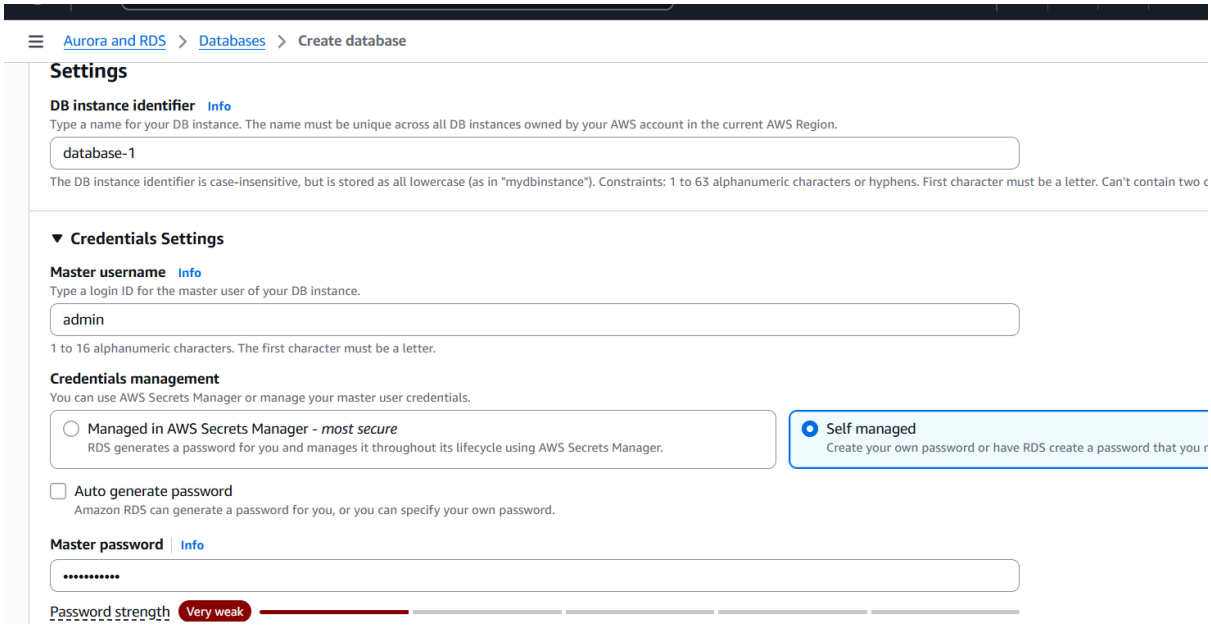
```
[root@ip-172-31-115-0 ~]# ls
mariadb_data_backup.sql
[root@ip-172-31-115-0 ~]#
```

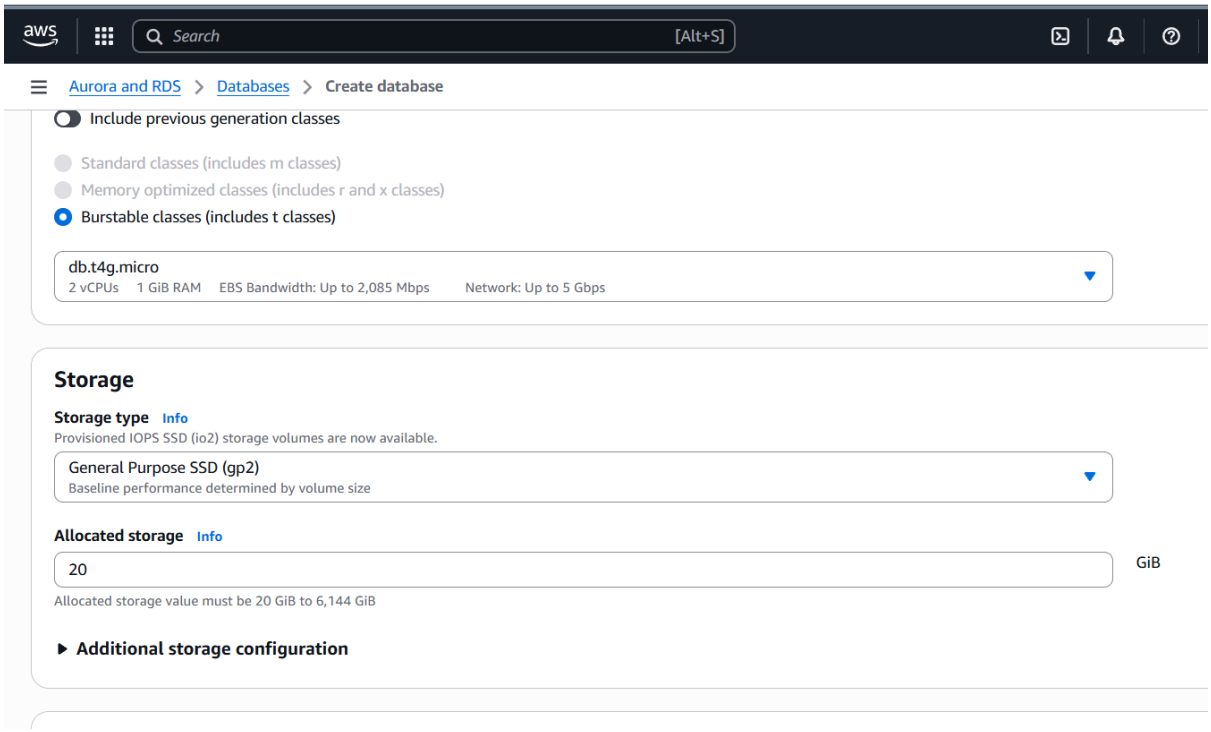
4.Launch MariaDB RDS instance.

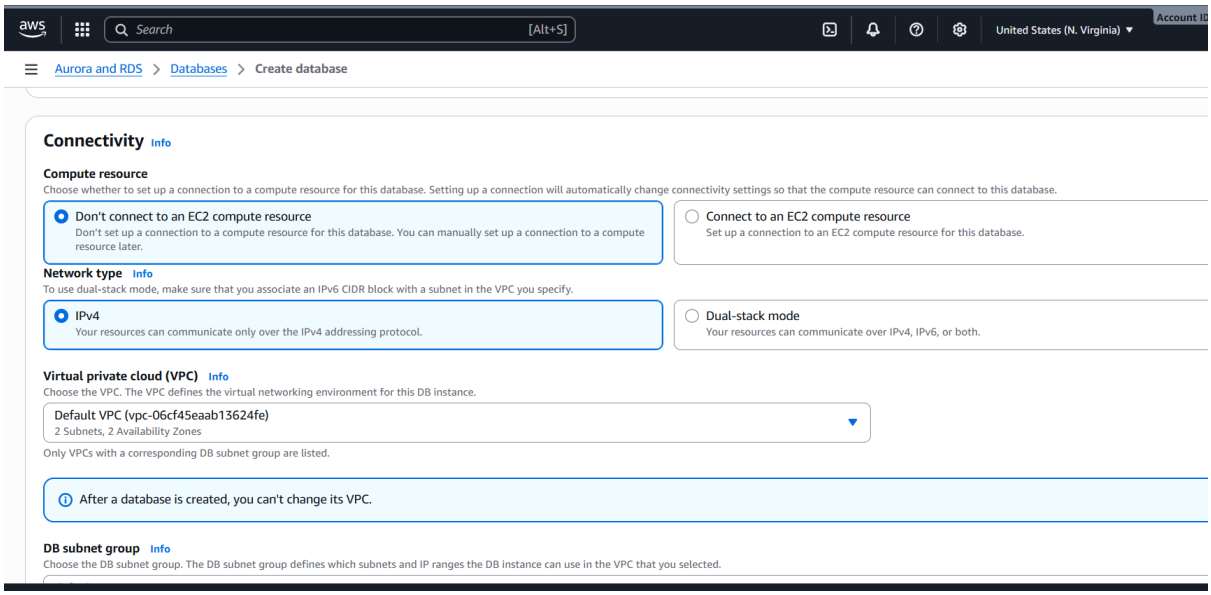
Go to aws and select aurora and rds, select databases and instances, create database.

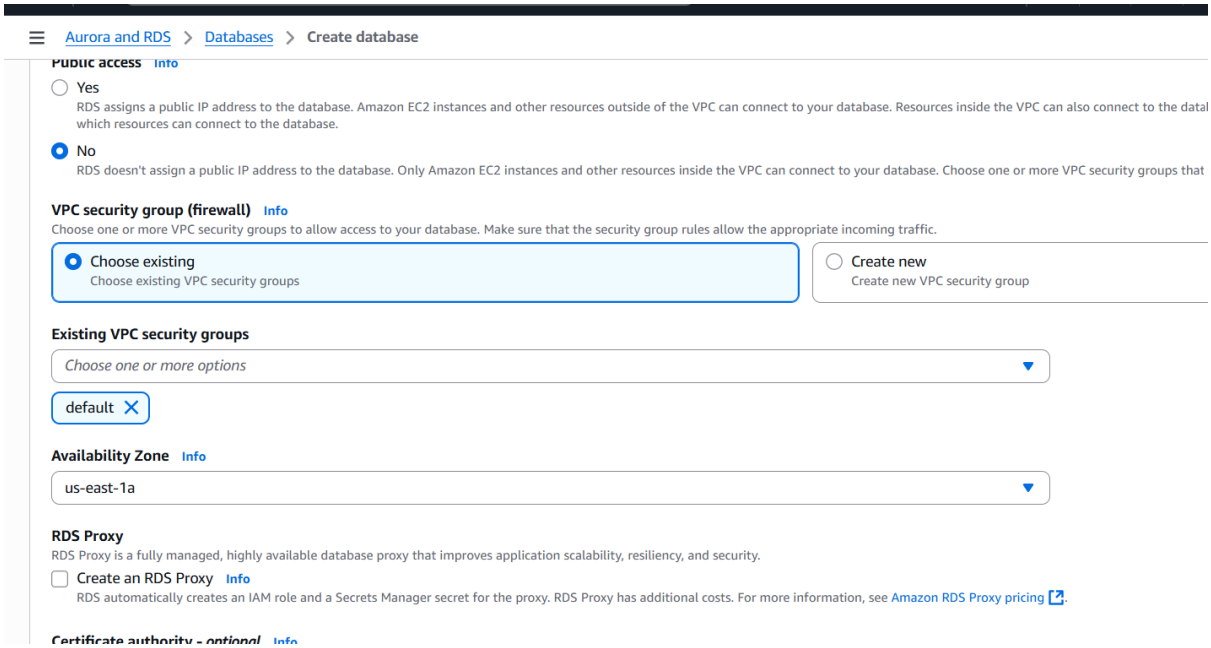


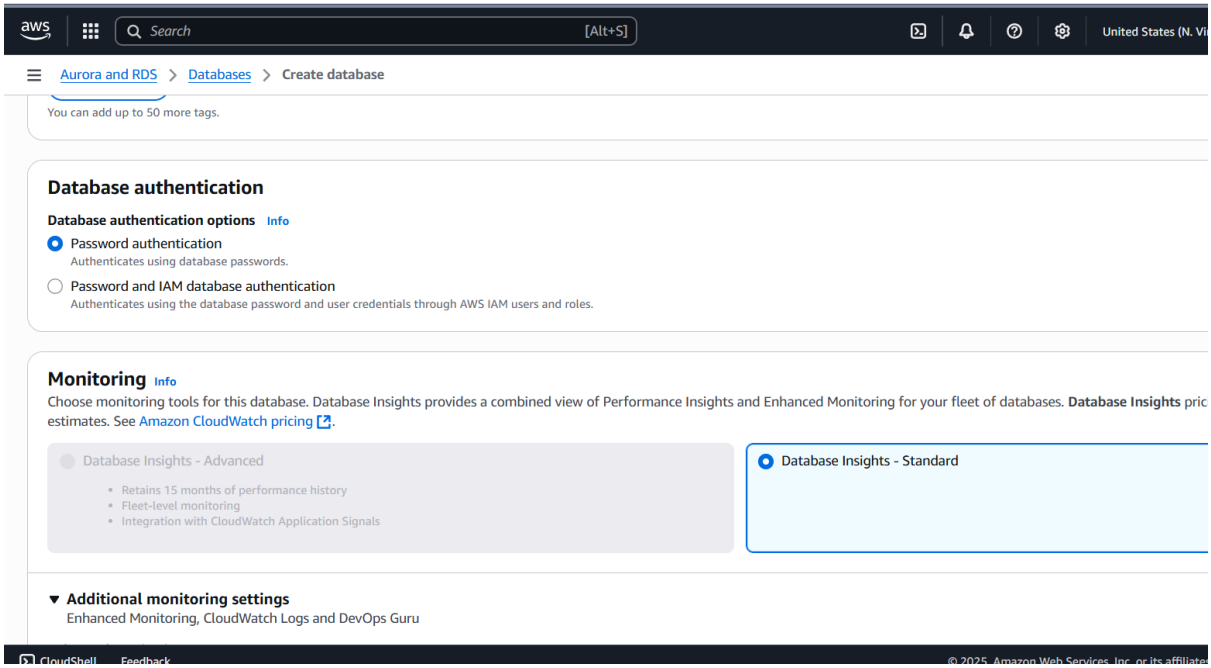

Aurora and RDS > Databases > Create database
Choose a database creation method
Standard create
You set all of the configuration options, including ones for availability, security, backups, and maintenance.
Easy create
Use recommended best-practice configurations. Some configuration options can be changed after the databa
created.
Engine options
Engine type Info
Aurora (MySQL Compatible)
Aurora (PostgreSQL Compatible)
MySQL
PostgreSQL
MariaDB
Oracle
ORACLE
Microsoft SQL Server
IBM Db2
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
28°C
ENG

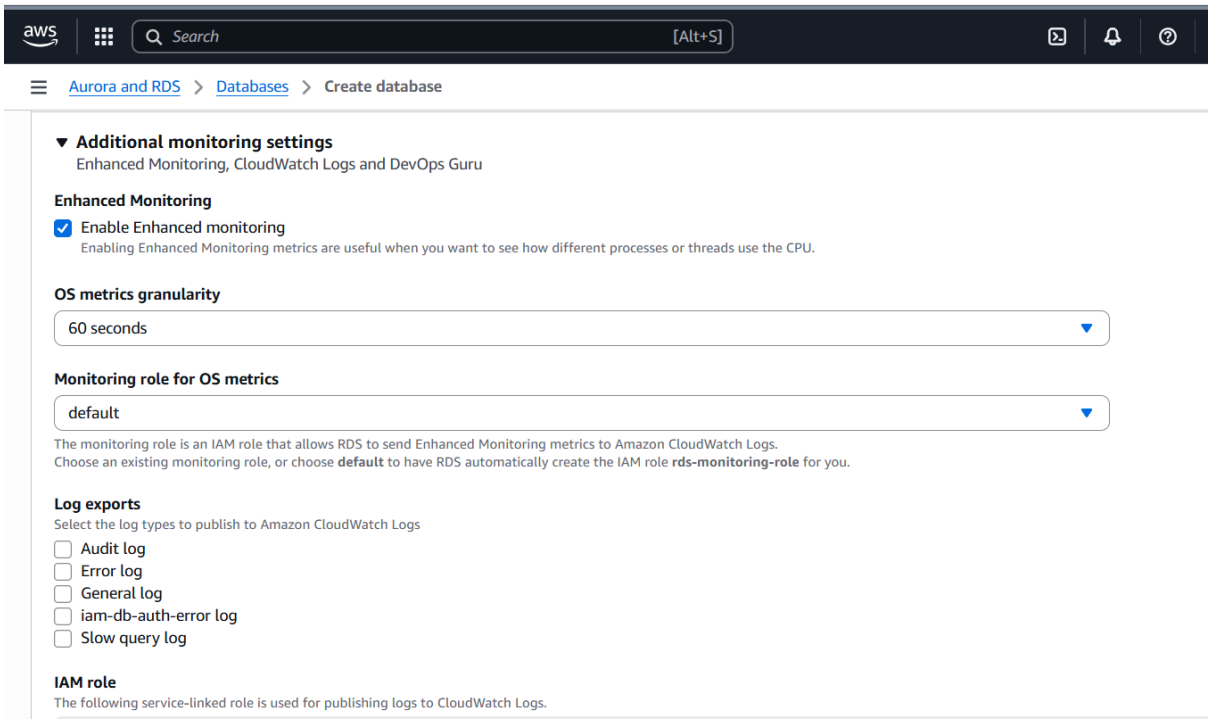

Aurora and RDS > Databases > Create database
Settings
DB instance identifier Info
Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.
database-1
The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Can't contain two c
Credentials Settings
Master username Info
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 r
Auto generate password
Amazon RDS can generate a password for you, or you can specify your own password.
Master password Info
Password strength
Very weak

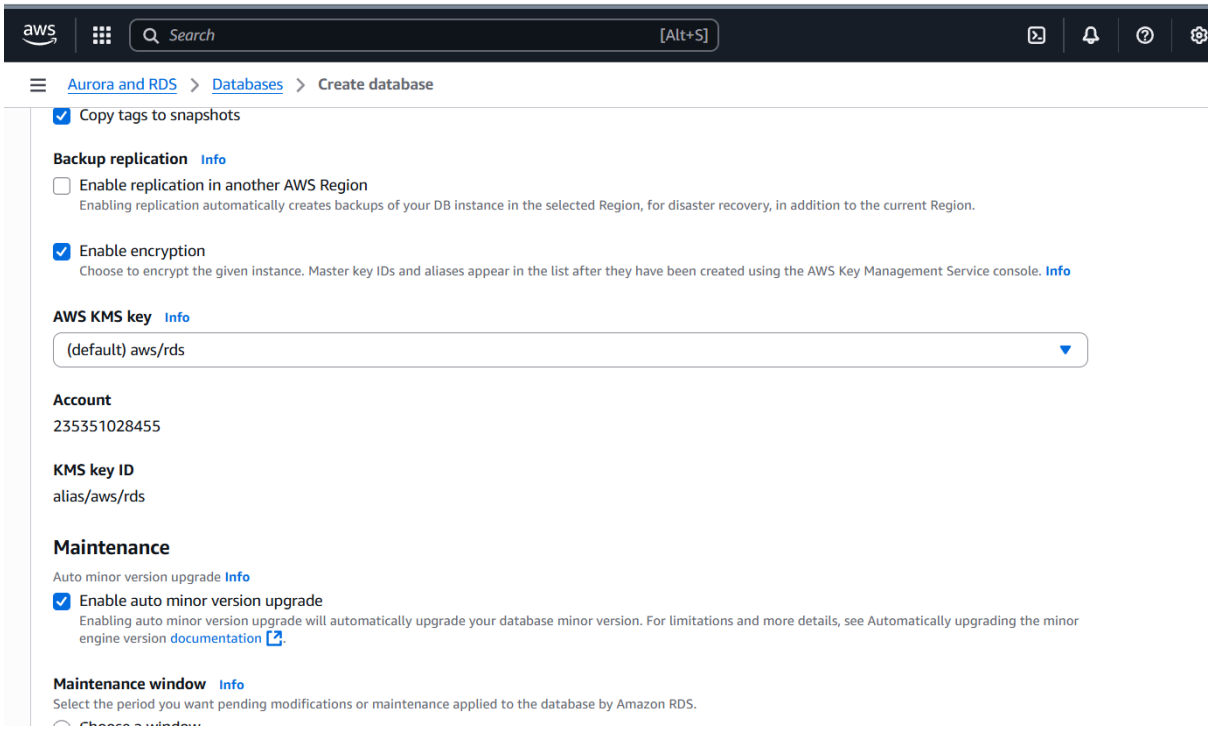

aws
Search
[Alt+S]
Aurora and RDS
Databases
Create database
Include previous generation classes
Standard classes (includes m classes)
Memory optimized classes (includes r and x classes)
Burstable classes (includes t classes)
db.t4g.micro
2 vCPUs 1 GiB RAM EBS Bandwidth: Up to 2,085 Mbps Network: Up to 5 Gbps
Storage
Storage type Info
Provisioned IOPS SSD (io2) storage volumes are now available.
General Purpose SSD (gp2)
Baseline performance determined by volume size
Allocated storage Info
20
GiB
Allocated storage value must be 20 GiB to 6,144 GiB
Additional storage configuration

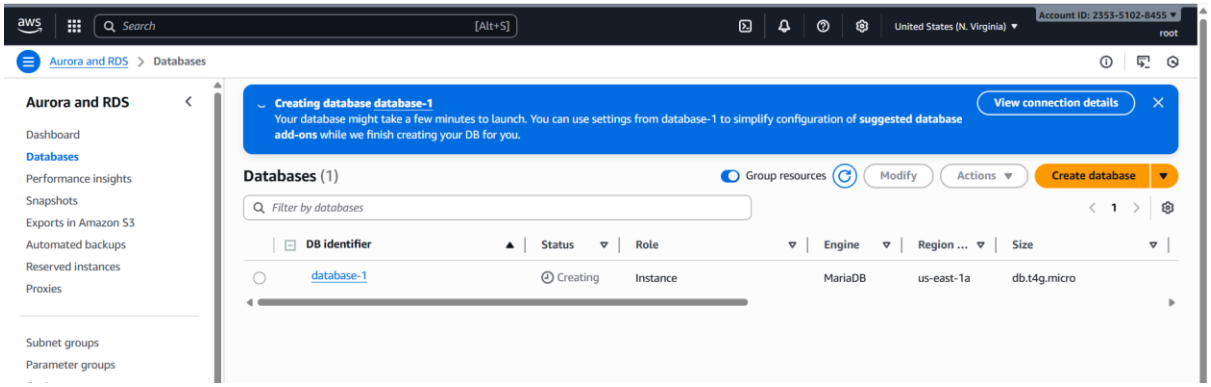

aws
Search
[Alt+S]
United States (N. Virginia)
Aurora and RDS
Databases
Create database
Connectivity Info
Compute resource
Choose whether to set up a connection to a compute resource for this database. Setting up a connection will automatically change connectivity settings so that the compute resource can connect to this database.
Don't connect to an EC2 compute resource
Don't set up a connection to a compute resource for this database. You can manually set up a connection to a compute resource later.
Connect to an EC2 compute resource
Set up a connection to an EC2 compute resource for this database.
Network type Info
To use dual-stack mode, make sure that you associate an IPv6 CIDR block with a subnet in the VPC you specify.
IPv4
Your resources can communicate only over the IPv4 addressing protocol.
Dual-stack mode
Your resources can communicate over IPv4, IPv6, or both.
Virtual private cloud (VPC) Info
Choose the VPC. The VPC defines the virtual networking environment for this DB instance.
Default VPC (vpc-06cf45eaab13624fe)
2 Subnets, 2 Availability Zones
Only VPCs with a corresponding DB subnet group are listed.
After a database is created, you can't change its VPC.
DB subnet group Info
Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB instance can use in the VPC that you selected.


Aurora and RDS > Databases > Create database
Public access Info
Yes
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 datal which resources can connect to the database.
No
RDS doesn't assign a public IP address to the database. Only Amazon EC2 instances and other resources inside the VPC can connect to your database. Choose one or more VPC security groups that
VPC security group (firewall) Info
Choose one or more VPC security groups to allow access to your database. Make sure that the security group rules allow the appropriate incoming traffic.
Choose existing
Choose existing VPC security groups
Create new
Create new VPC security group
Existing VPC security groups
Choose one or more options
default
Availability Zone Info
us-east-1a
RDS Proxy
RDS Proxy is a fully managed, highly available database proxy that improves application scalability, resiliency, and security.
Create an RDS Proxy Info
RDS automatically creates an IAM role and a Secrets Manager secret for the proxy. RDS Proxy has additional costs. For more information, see Amazon RDS Proxy pricing.


aws
Search
[Alt+S]
United States (N. Vi
Aurora and RDS > Databases > Create database
You can add up to 50 more tags.
Database authentication
Database authentication options Info
Password authentication
Authenticates using database passwords.
Password and IAM database authentication
Authenticates using the database password and user credentials through AWS IAM users and roles.
Monitoring Info
Choose monitoring tools for this database. Database Insights provides a combined view of Performance Insights and Enhanced Monitoring for your fleet of databases. Database Insights pric
estimates. See Amazon CloudWatch pricing.
Database Insights - Advanced
Retains 15 months of performance history
Fleet-level monitoring
Integration with CloudWatch Application Signals
Database Insights - Standard
Additional monitoring settings
Enhanced Monitoring, CloudWatch Logs and DevOps Guru
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affiliates


aws
Search
[Alt+S]
Aurora and RDS
Databases
Create database
Additional monitoring settings
Enhanced Monitoring, CloudWatch Logs and DevOps Guru
Enhanced Monitoring
Enable Enhanced monitoring
Enabling Enhanced Monitoring metrics are useful when you want to see how different processes or threads use the CPU.
OS metrics granularity
60 seconds
Monitoring role for OS metrics
default
The monitoring role is an IAM role that allows RDS to send Enhanced Monitoring metrics to Amazon CloudWatch Logs.
Choose an existing monitoring role, or choose default to have RDS automatically create the IAM role rds-monitoring-role for you.
Log exports
Select the log types to publish to Amazon CloudWatch Logs
Audit log
Error log
General log
iam-db-auth-error log
Slow query log
IAM role
The following service-linked role is used for publishing logs to CloudWatch Logs.


aws
Search
[Alt+S]
Aurora and RDS
Databases
Create database
Copy tags to snapshots
Backup replication Info
Enable replication in another AWS Region
Enabling replication automatically creates backups of your DB instance in the selected Region, for disaster recovery, in addition to the current Region.
Enable encryption
Choose to encrypt the given instance. Master key IDs and aliases appear in the list after they have been created using the AWS Key Management Service console. Info
AWS KMS key Info
(default) aws/rds
Account
235351028455
KMS key ID
alias/aws/rds
Maintenance
Auto minor version upgrade Info
Enable auto minor version upgrade
Enabling auto minor version upgrade will automatically upgrade your database minor version. For limitations and more details, see Automatically upgrading the minor engine version documentation.
Maintenance window Info
Select the period you want pending modifications or maintenance applied to the database by Amazon RDS.



5.Migrate database from EC2 to RDS.

use the command

- mysqldump -u root -p database_name > file_name.sql
- Migrate the DB dump that you have taken in step 1 to RDS

  mysql -h <replace-rds-end-point-here> -P 3306 -u <user_name> -p database_name < ec2db.sql

```
[root@ip-172-31-19-114 ~]# mysql -h my-rds-mariadb.c45kqc8o02sl.us-east-1.rds.a
mazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 45
Server version: 11.4.5-MariaDB managed by https://aws.amazon.com/rds/

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.008 sec)
```

```
MariaDB [(none)]> create database rdsdb;
Query OK, 1 row affected (0.003 sec)

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| rdsdb              |
| sys                |
+--------------------+
6 rows in set (0.001 sec)

MariaDB [(none)]> exit
Bye
```

Then migrate the data from EC2 to rds:

```
[root@ip-172-31-19-114 ~]# mysql -h my-rds-mariadb.c45kqc8o02sl.us-east-1.rds.a
mazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 57
Server version: 11.4.5-MariaDB managed by https://aws.amazon.com/rds/

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| rdsdb              |
| sys                |
+--------------------+
6 rows in set (0.001 sec)
```

Then switch to the rdsdb database and select the table to see the migrated data select* FROM table1;

```
MariaDB [(none)]> use rdsdb;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [rdsdb]> select * from table1;
+------+--------+
| id   | name   |
+------+--------+
|    1 | Virat  |
|    2 | Sachin |
|    3 | Dhoni  |
|    4 | ABD    |
+------+--------+
4 rows in set (0.001 sec)
```

6. Install MySQL DB on EC2.

Remove mariadb by using sudo dnf remove -y mariadb105*

```
[root@ip-172-31-115-0 ~]# sudo dnf remove -y mariadb105*
Dependencies resolved.
================================================================================
 Package                                                 Architecture
================================================================================
Removing:
 mariadb105                                              x86_64
 mariadb105-backup                                       x86_64
 mariadb105-common                                       x86_64
 mariadb105-cracklib-password-check                      x86_64
 mariadb105-errmsg                                       x86_64
 mariadb105-gssapi-server                                x86_64
 mariadb105-server                                       x86_64
 mariadb105-server-utils                                 x86_64
Removing unused dependencies:
 mariadb-connector-c                                     x86_64
 mariadb-connector-c-config                              noarch
 mysql-selinux                                           noarch
 perl-B                                                  x86_64
 perl-DBD-MariaDB                                        x86_64
```

sudo dnf clean packages

```
Complete!
[root@ip-172-31-115-0 ~]# sudo dnf clean packages
0 files removed
[root@ip-172-31-115-0 ~]#
```

- Change directory to opt.
- sudo wget https://dev.mysql.com/get/mysql80-community-release-el9-1.noarch.rpm
- sudo dnf install mysql80-community-releaseel91.noarch.rpm-y

```
[root@ip-172-31-115-0 opt]# wget https://dev.mysql.com/get/mysql80-community-release-el9-1.noarch.rpm
--2025-10-13 10:14:03--  https://dev.mysql.com/get/mysql80-community-release-el9-1.noarch.rpm
Resolving dev.mysql.com (dev.mysql.com)... 23.207.138.29, 2600:1408:7400:4b7::2e31, 2600:1408:7400:493::2e31
Connecting to dev.mysql.com (dev.mysql.com)|23.207.138.29|:443... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: https://repo.mysql.com//mysql80-community-release-el9-1.noarch.rpm [following]
--2025-10-13 10:14:03--  https://repo.mysql.com//mysql80-community-release-el9-1.noarch.rpm
Resolving repo.mysql.com (repo.mysql.com)... 23.33.203.94, 2600:1408:a:186::1d68, 2600:1408:a:197::1d68
Connecting to repo.mysql.com (repo.mysql.com)|23.33.203.94|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 10534 (10K) [application/x-redhat-package-manager]
Saving to: 'mysql80-community-release-el9-1.noarch.rpm'

mysql80-community-release-el9-1.noarch. 100%[=========================================================================

2025-10-13 10:14:03 (189 MB/s) - 'mysql80-community-release-el9-1.noarch.rpm' saved [10534/10534]

[root@ip-172-31-115-0 opt]# dnf install mysql80-community-release-el9-1.noarch.rpm -y
Last metadata expiration check: 3:38:51 ago on Mon Oct 13 06:35:45 2025.
Dependencies resolved.
=================================================================================================================
 Package                                    Architecture                Version
=================================================================================================================
Installing:
 mysql80-community-release                  noarch                      el9-1

Transaction Summary
=================================================================================================================
```

sudo dnf install mysql-community-server -y

```
[root@ip-172-31-115-0 opt]#  rpm --import https://repo.mysql.com/RPM-GPG-KEY-mysql-2023
[root@ip-172-31-115-0 opt]# dnf install mysql-community-server -y
MySQL 8.0 Community Server
MySQL Connectors Community
MySQL Tools Community
Dependencies resolved.
=================================================================================================================
 Package                                    Architecture                Version
=================================================================================================================
Installing:
 mysql-community-server                     x86_64                      8.0.43-1.el9
Installing dependencies:
 mysql-community-client                     x86_64                      8.0.43-1.el9
 mysql-community-client-plugins             x86_64                      8.0.43-1.el9
 mysql-community-common                     x86_64                      8.0.43-1.el9
 mysql-community-icu-data-files             x86_64                      8.0.43-1.el9
 mysql-community-libs                       x86_64                      8.0.43-1.el9

Transaction Summary
```

Sudo sysstemctl start sqld

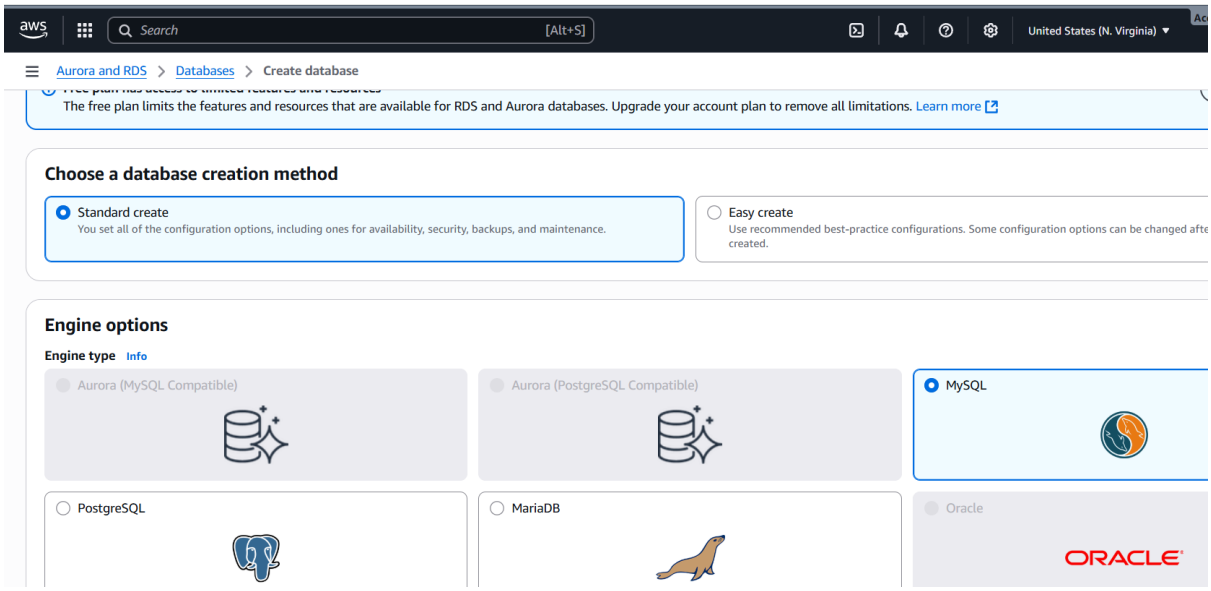
Sudo systemctl ststus sqld.

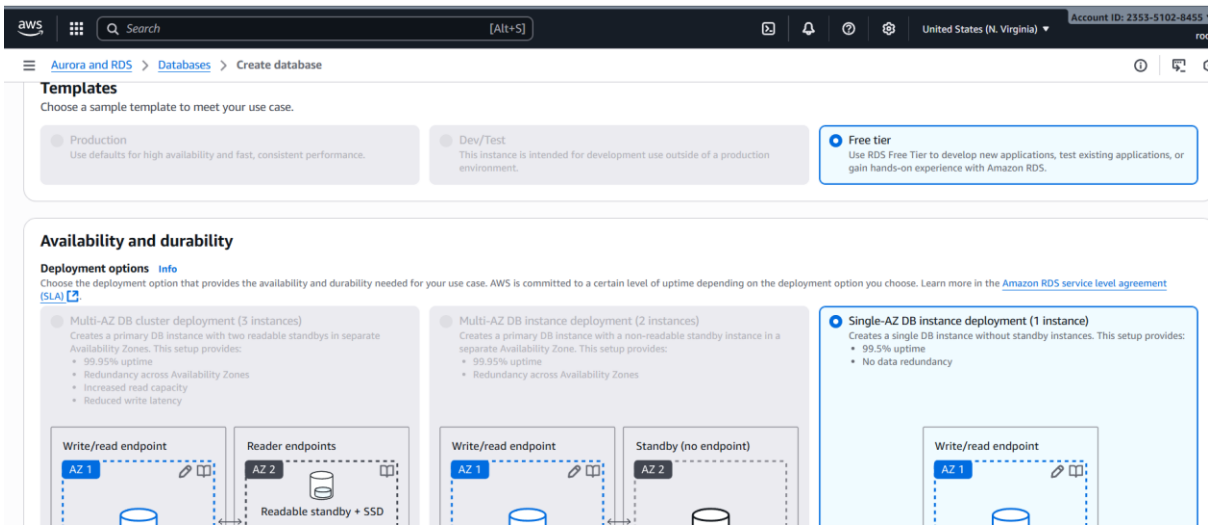
```
[root@ip-172-31-35-200 opt]# sudo systemctl start mysqld
[root@ip-172-31-35-200 opt]# sudo systemctl status mysqld
● mysqld.service - MySQL Server
     Loaded: loaded (/usr/lib/systemd/system/mysqld.service; enabled; preset: disabled)
     Active: active (running) since Sun 2025-10-12 19:26:34 UTC; 21s ago
       Docs: man:mysqld(8)
             http://dev.mysql.com/doc/refman/en/using-systemd.html
    Process: 41203 ExecStartPre=/usr/bin/mysqld_pre_systemd (code=exited, status=0/SUCCESS)
   Main PID: 41275 (mysqld)
     Status: "Server is operational"
```

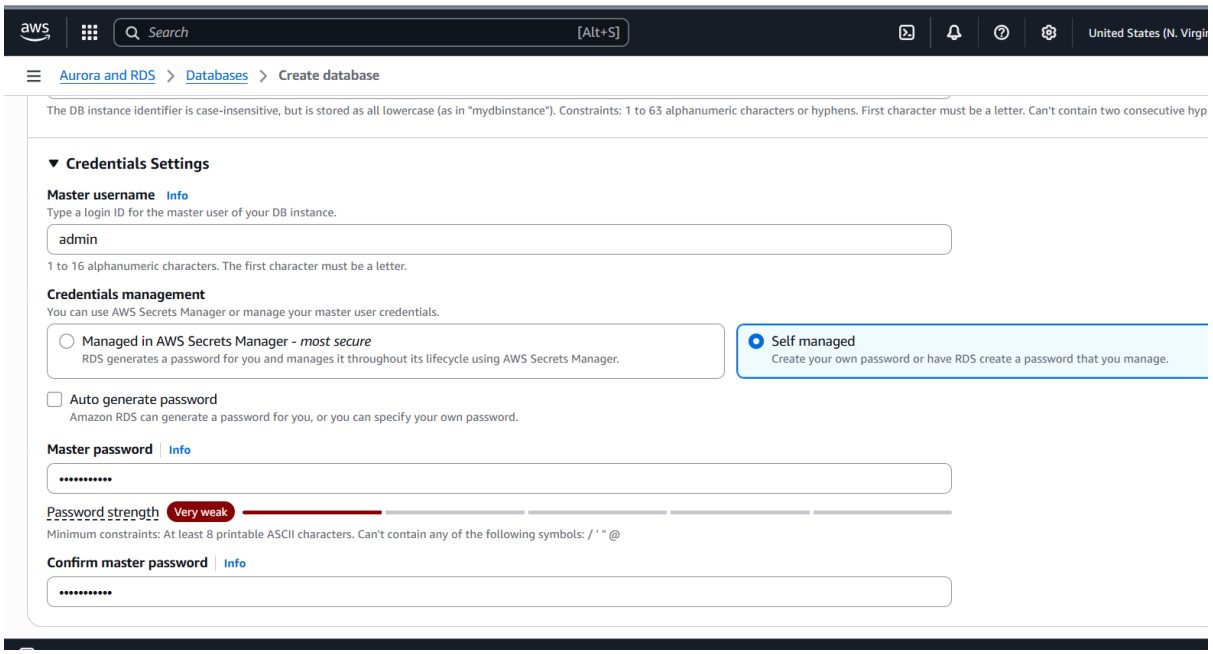
```
[root@ip-172-31-35-200 opt]# sudo mysql_secure_installation

Securing the MySQL server deployment.

Enter password for user root:
The 'validate_password' component is installed on the server.
The subsequent steps will run with the existing configuration
of the component.
Using existing password for root.

Estimated strength of the password: 100
Change the password for root ? ((Press y|Y for Yes, any other key for No) : n
```

7.Launch MySQL RDS image.

Go to aurora and rds databases and create databases. Select standard and mysql.




aws
Search
[Alt+S]
United States (N. Virginia)
Account ID: 2353-5102-8455
Aurora and RDS > Databases > Create database
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.
Availability and durability
Deployment options Info
Choose the deployment option that provides the availability and durability needed for your use case. AWS is committed to a certain level of uptime depending on the deployment option you choose. Learn more in the Amazon RDS service level agreement (SLA).
Multi-AZ DB cluster deployment (3 instances)
Creates a primary DB instance with two readable standbys in separate Availability Zones. This setup provides:
99.95% uptime
Redundancy across Availability Zones
Increased read capacity
Reduced write latency
Write/read endpoint
AZ 1
Reader endpoints
AZ 2
Readable standby + SSD
Multi-AZ DB instance deployment (2 instances)
Creates a primary DB instance with a non-readable standby instance in a separate Availability Zone. This setup provides:
99.95% uptime
Redundancy across Availability Zones
Write/read endpoint
AZ 1
Standby (no endpoint)
AZ 2
Single-AZ DB instance deployment (1 instance)
Creates a single DB instance without standby instances. This setup provides:
99.5% uptime
No data redundancy
Write/read endpoint
AZ 1


aws
Search
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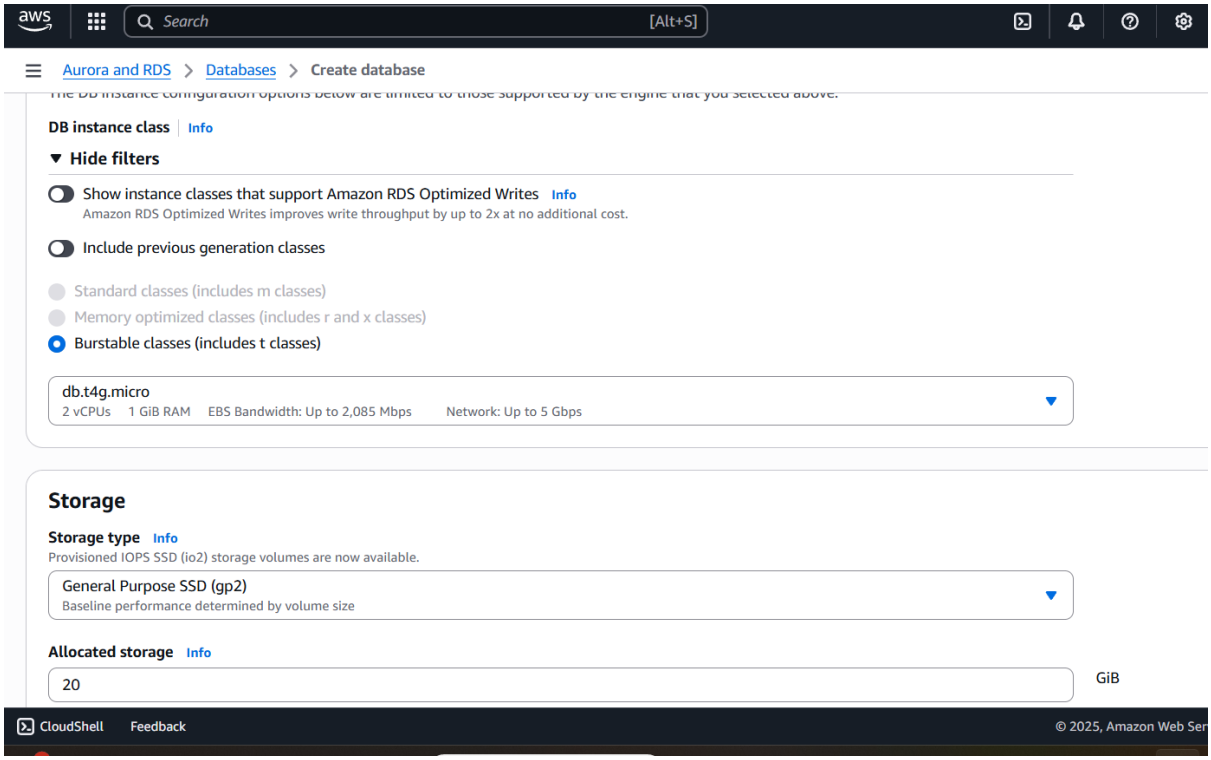
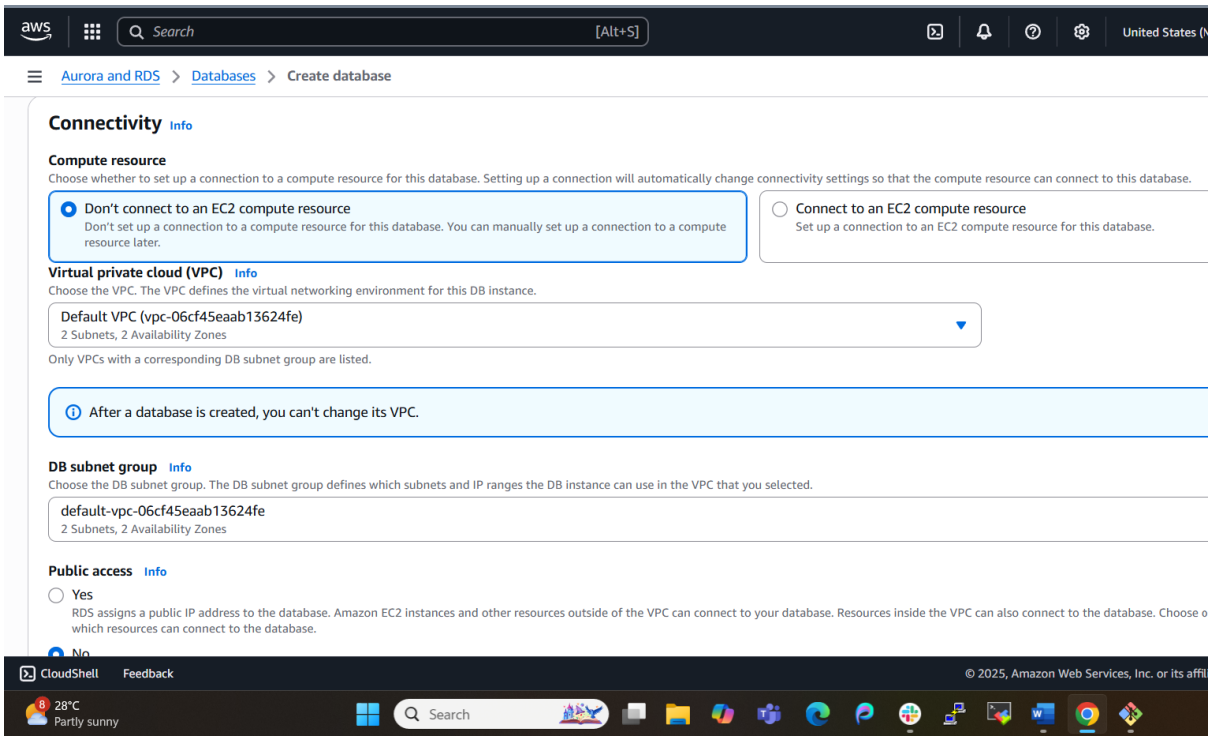
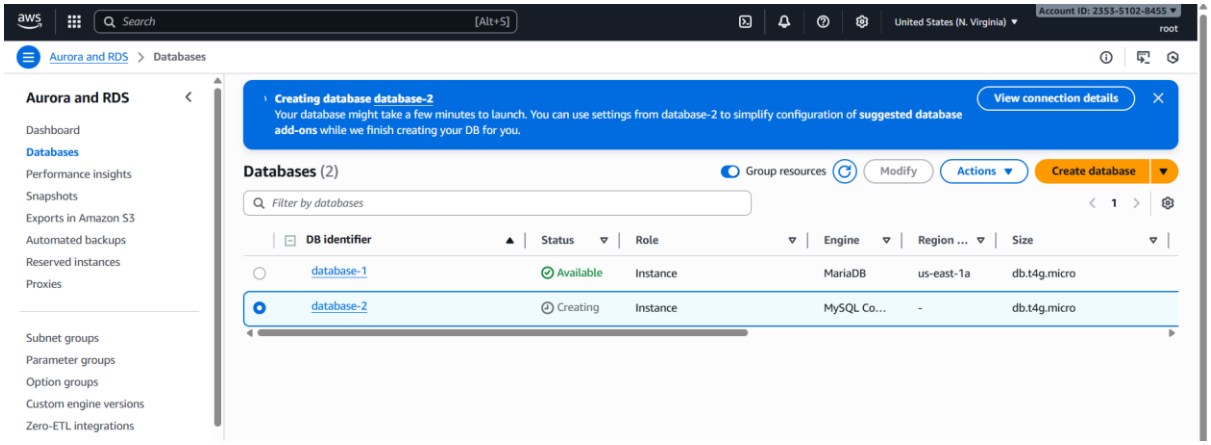
United States (N. Virgi
Aurora and RDS > Databases > Create database
The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyp
Credentials Settings
Master username Info
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 Info
Password strength
Very weak
Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / ' " @
Confirm master password Info

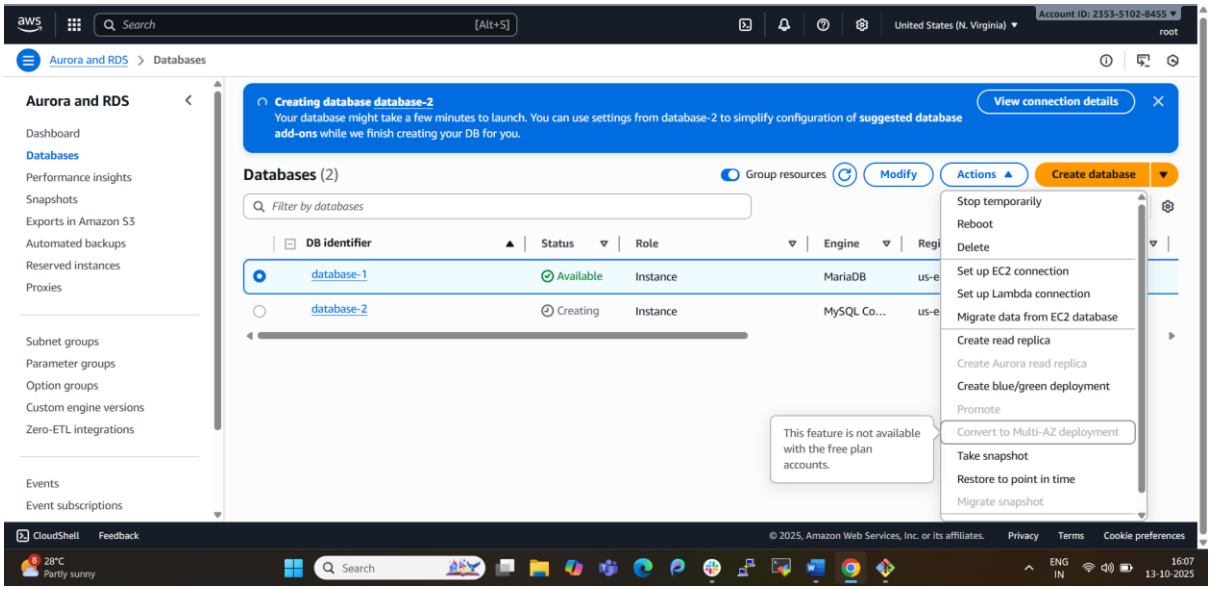

aws
Search
[Alt+S]
Aurora and RDS > Databases > Create database
DB instance class Info
Hide filters
Show instance classes that support Amazon RDS Optimized Writes Info
Amazon RDS Optimized Writes improves write throughput by up to 2x at no additional cost.
Include previous generation classes
Standard classes (includes m classes)
Memory optimized classes (includes r and x classes)
Burstable classes (includes t classes)
db.t4g.micro
2 vCPUs 1 GiB RAM EBS Bandwidth: Up to 2,085 Mbps Network: Up to 5 Gbps
Storage
Storage type Info
Provisioned IOPS SSD (io2) storage volumes are now available.
General Purpose SSD (gp2)
Baseline performance determined by volume size
Allocated storage Info
20
GiB
CloudShell
Feedback
© 2025, Amazon Web Ser


aws
Search
[Alt+S]
United States (N
Aurora and RDS > Databases > Create database
Connectivity Info
Compute resource
Choose whether to set up a connection to a compute resource for this database. Setting up a connection will automatically change connectivity settings so that the compute resource can connect to this database.
Don't connect to an EC2 compute resource
Don't set up a connection to a compute resource for this database. You can manually set up a connection to a compute resource later.
Connect to an EC2 compute resource
Set up a connection to an EC2 compute resource for this database.
Virtual private cloud (VPC) Info
Choose the VPC. The VPC defines the virtual networking environment for this DB instance.
Default VPC (vpc-06cf45eaab13624fe)
2 Subnets, 2 Availability Zones
Only VPCs with a corresponding DB subnet group are listed.
After a database is created, you can't change its VPC.
DB subnet group Info
Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB instance can use in the VPC that you selected.
default-vpc-06cf45eaab13624fe
2 Subnets, 2 Availability Zones
Public access Info
Yes
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 o
which resources can connect to the database.
No
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affil
28°C
Partly sunny
Search



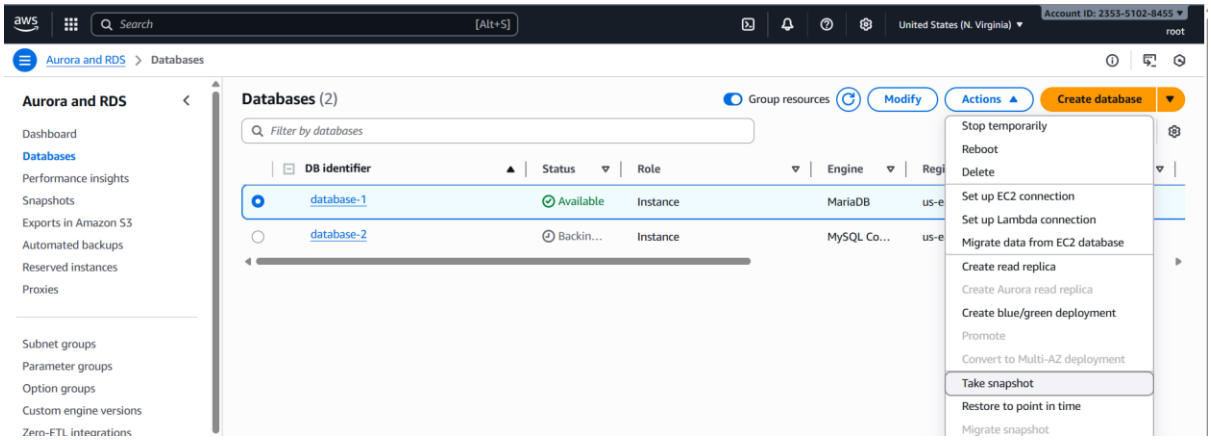
8. Configure Multi-AZ.

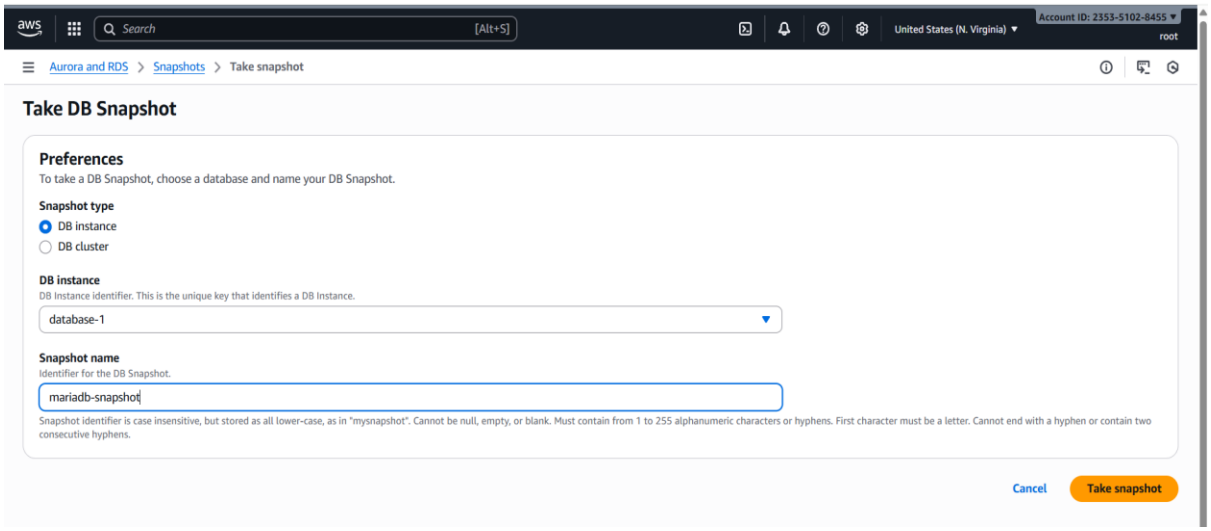
Go to aurora and rds and select your database and click on actions and select convert to multi-AZ deployment.



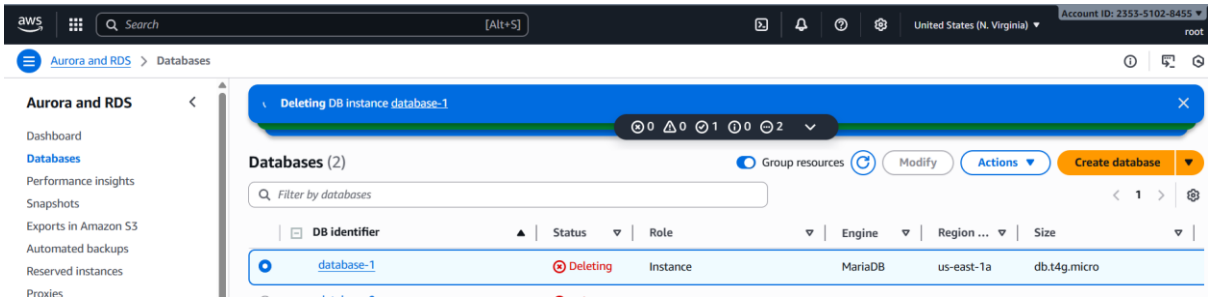
9.Take backup of DB and restore the DB.

Select your database and click on snapshot

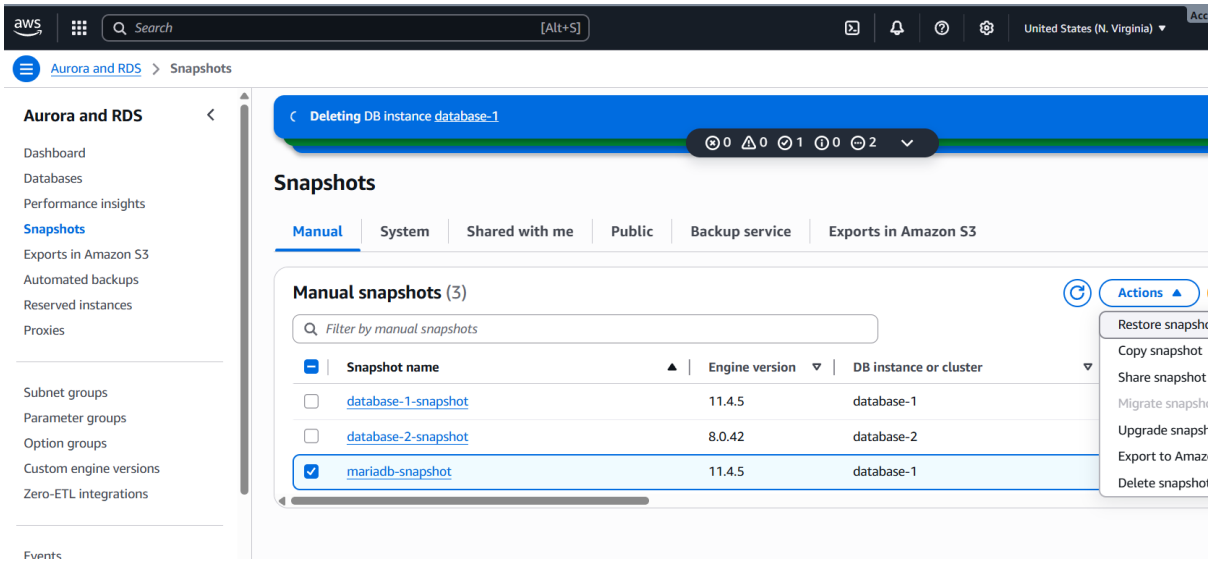


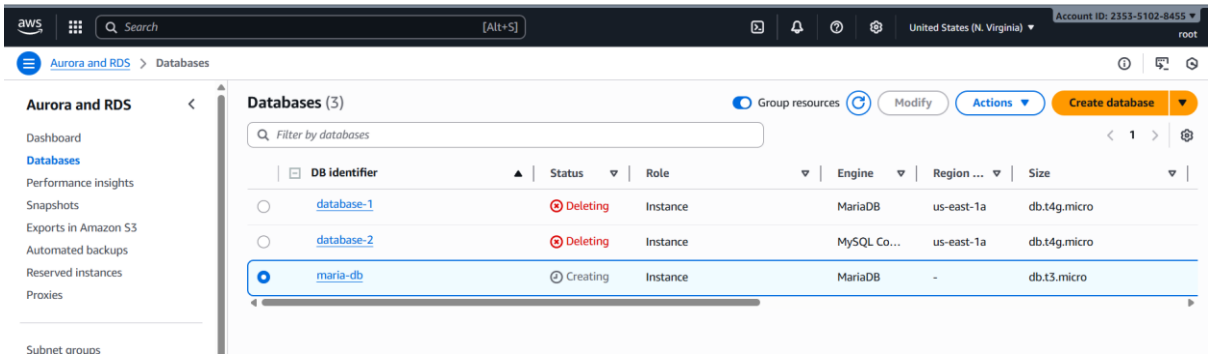


After taking the backup delete the database.



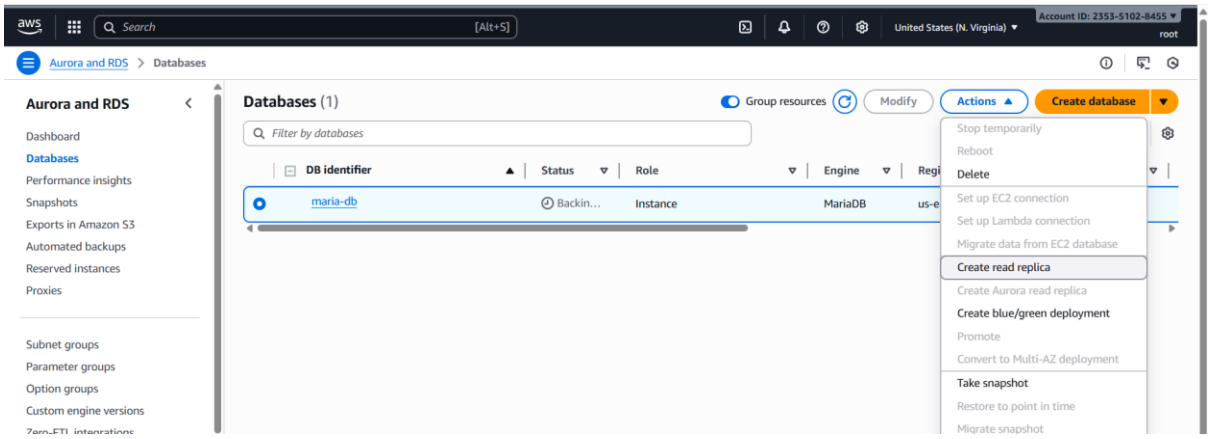
Go to snapshots and select on snapshot click on actions and restore snapshot.

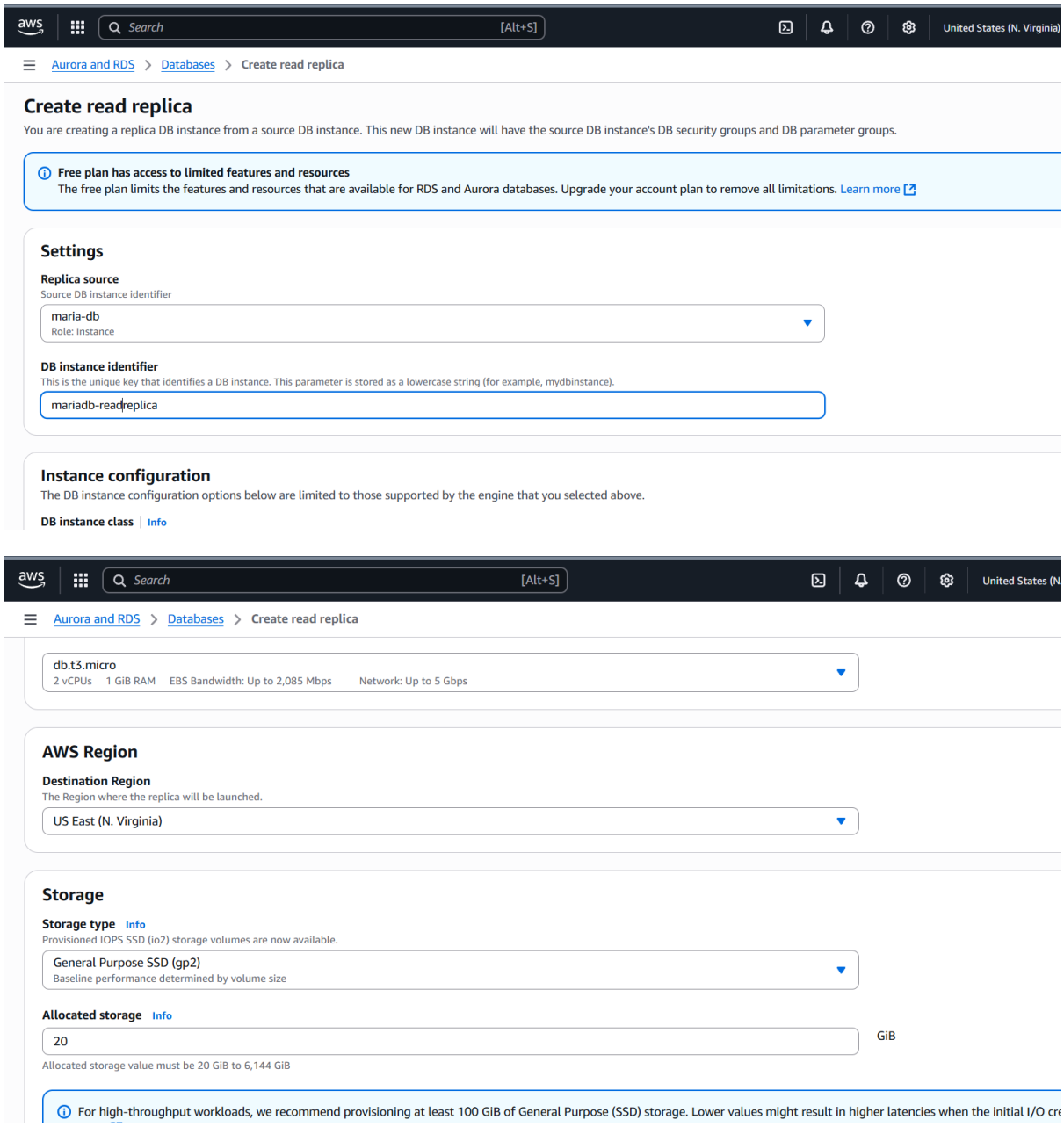




10.Create read replica.

Select database and click on action and select create read replica.




aws
Search
[Alt+S]
United States (N. Virginia)
Aurora and RDS
Databases
Create read replica
Create read replica
You are creating a replica DB instance from a source DB instance. This new DB instance will have the source DB instance's DB security groups and DB parameter groups.
Free plan has access to limited features and resources
The free plan limits the features and resources that are available for RDS and Aurora databases. Upgrade your account plan to remove all limitations. Learn more
Settings
Replica source
Source DB instance identifier
maria-db
Role: Instance
DB instance identifier
This is the unique key that identifies a DB instance. This parameter is stored as a lowercase string (for example, mydbinstance).
mariadb-readreplica
Instance configuration
The DB instance configuration options below are limited to those supported by the engine that you selected above.
DB instance class
Info
aws
Search
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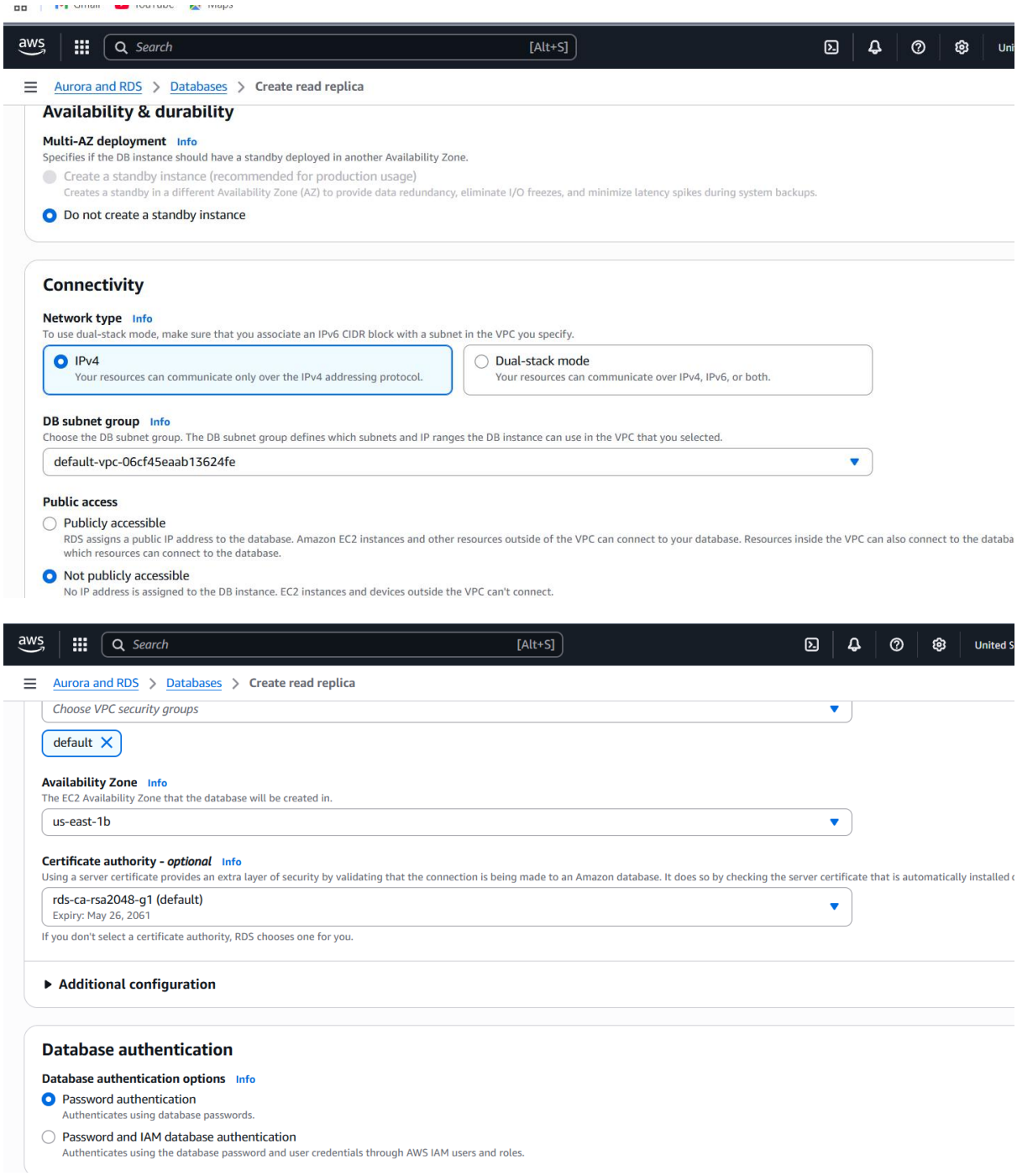
United States (N
Aurora and RDS
Databases
Create read replica
db.t3.micro
2 vCPUs 1 GiB RAM EBS Bandwidth: Up to 2,085 Mbps Network: Up to 5 Gbps
AWS Region
Destination Region
The Region where the replica will be launched.
US East (N. Virginia)
Storage
Storage type
Info
Provisioned IOPS SSD (io2) storage volumes are now available.
General Purpose SSD (gp2)
Baseline performance determined by volume size
Allocated storage
Info
20
GiB
Allocated storage value must be 20 GiB to 6,144 GiB
For high-throughput workloads, we recommend provisioning at least 100 GiB of General Purpose (SSD) storage. Lower values might result in higher latencies when the initial I/O cre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Aurora and RDS
Databases
Create read replica
Availability & durability
Multi-AZ deployment Info
Specifies if the DB instance should have a standby deployed in another Availability Zone.
Create a standby instance (recommended for production usage)
Creates a standby in a different Availability Zone (AZ) to provide data redundancy, eliminate I/O freezes, and minimize latency spikes during system backups.
Do not create a standby instance
Connectivity
Network type Info
To use dual-stack mode, make sure that you associate an IPv6 CIDR block with a subnet in the VPC you specify.
IPv4
Your resources can communicate only over the IPv4 addressing protocol.
Dual-stack mode
Your resources can communicate over IPv4, IPv6, or both.
DB subnet group Info
Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB instance can use in the VPC that you selected.
default-vpc-06cf45eaab13624fe
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 databa
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.

aws
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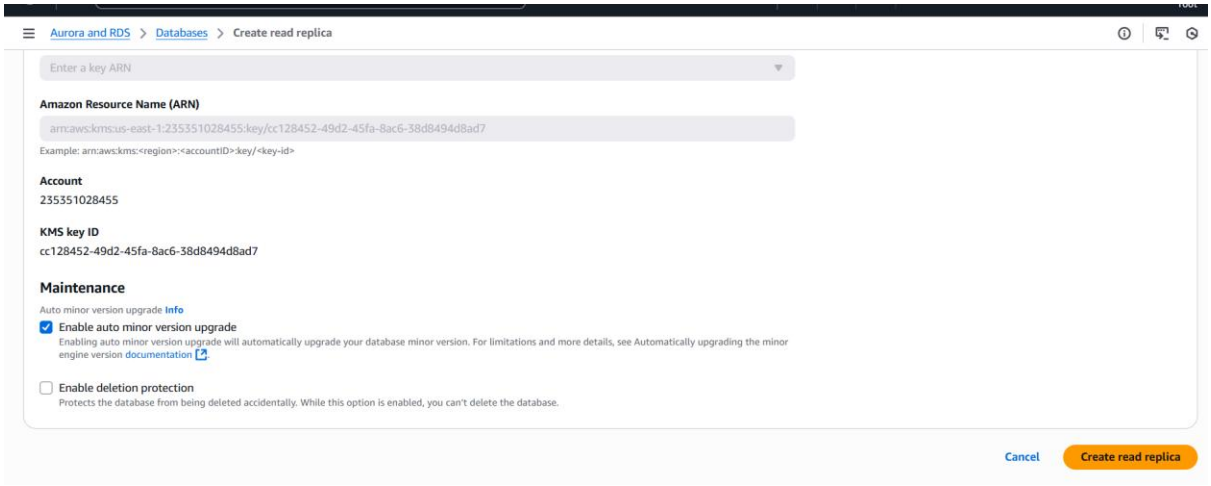
United S
Aurora and RDS
Databases
Create read replica
Choose VPC security groups
default
Availability Zone Info
The EC2 Availability Zone that the database will be created in.
us-east-1b
Certificate authority - optional Info
Using a server certificate provides an extra layer of security by validating that the connection is being made to an Amazon database. It does so by checking the server certificate that is automatically installed
rds-ca-rsa2048-g1 (default)
Expiry: May 26, 2061
If you don't select a certificate authority, RDS chooses one for you.
Additional configuration
Database authentication
Database authentication options Info
Password authentication
Authenticates using database passwords.
Password and IAM database authentication
Authenticates using the database password and user credentials through AWS IAM users and roles.


Aurora and RDS > Databases > Create read replica
Enter a key ARN
Amazon Resource Name (ARN)
arn:aws:kms:us-east-1:235351028455:key/cc128452-49d2-45fa-8ac6-38d8494d8ad7
Example: arn:aws:kms:<region>:<accountID>:key/<key-id>
Account
235351028455
KMS key ID
cc128452-49d2-45fa-8ac6-38d8494d8ad7
Maintenance
Auto minor version upgrade Info
Enable auto minor version upgrade
Enabling auto minor version upgrade will automatically upgrade your database minor version. For limitations and more details, see Automatically upgrading the minor engine version documentation
Enable deletion protection
Protects the database from being deleted accidentally. While this option is enabled, you can't delete the database.
Cancel
Create read replica