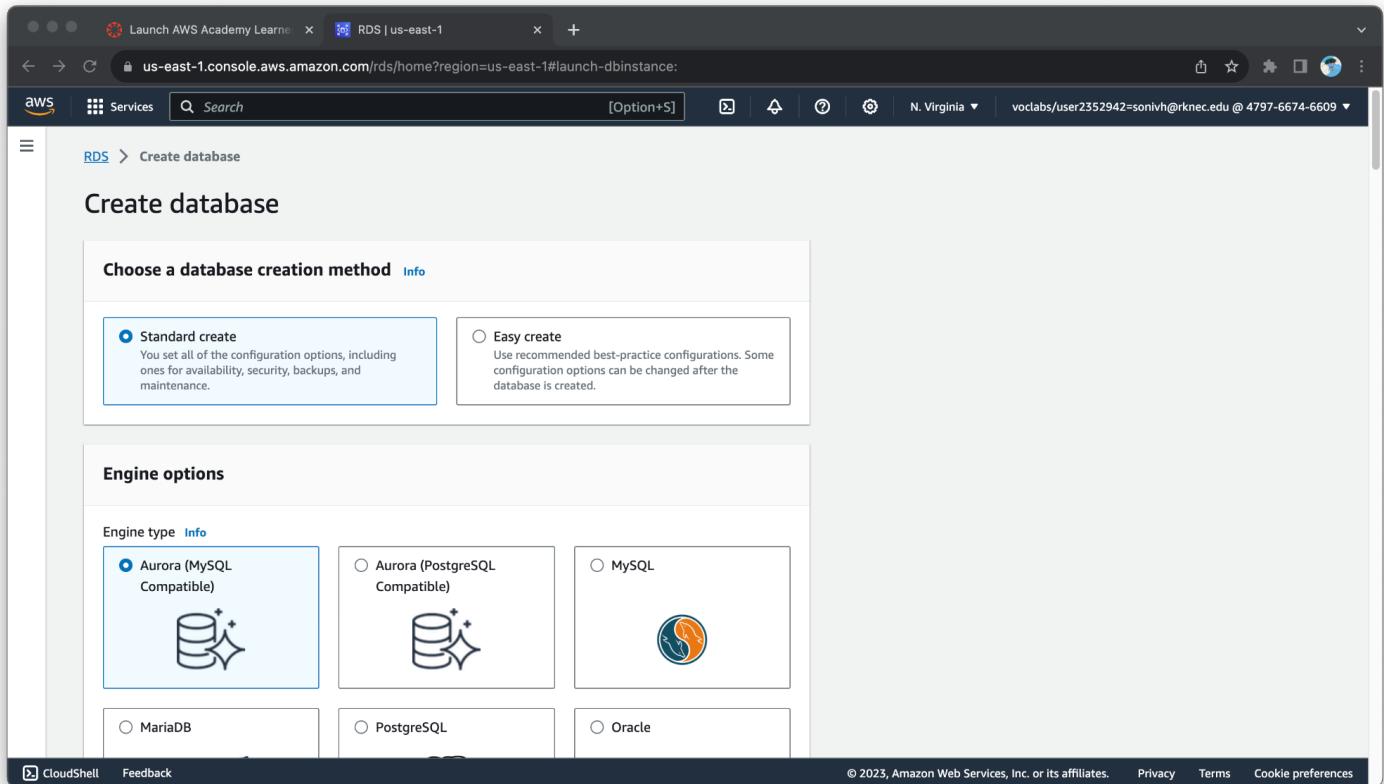


CLOUD COMPUTING LAB 5

Aim : Demonstrate the working of Database

Create the RDB instance using MySQL



The screenshot shows the 'Create database' wizard in the AWS RDS console. The top navigation bar includes tabs for 'Launch AWS Academy Learner', 'RDS | us-east-1', and a search bar. The main content area is titled 'Create database'. Under 'Choose a database creation method', the 'Standard create' option is selected. Below this, under 'Engine options', the 'Aurora (MySQL Compatible)' option is selected, indicated by a blue border around its icon and label.

DB cluster identifier [Info](#)
Enter a name for your DB cluster. The name must be unique across all DB clusters owned by your AWS account in the current AWS Region.
The DB cluster identifier is case-insensitive, but is stored as all lowercase (as in "mydbcluster"). Constraints: 1 to 60 alphanumeric characters or 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 cluster.
1 to 16 alphanumeric characters. The 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.

MySQL

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 64 TiB.
- Supports General Purpose, Memory Optimized, and Burstable Performance instance classes.
- Supports automated backup and point-in-time recovery.
- Supports up to 15 Read Replicas per instance, within a single Region or 5 read replicas cross-region.

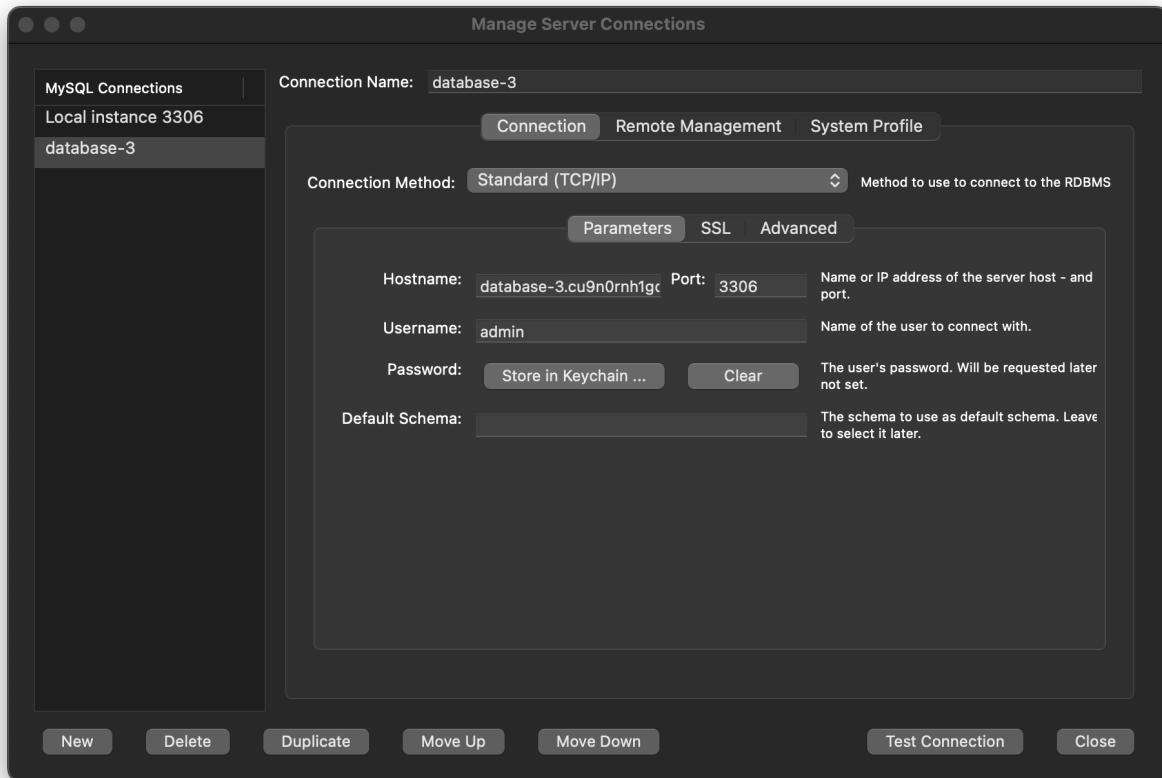
Auto generate a password
Amazon RDS can generate a password for you, or you can specify your own password.

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](#)

DB identifier	Status	Role	Engine	Region & AZ	Size	Actions	CPU
database-1	Available	Instance	MySQL Community	us-east-1a	db.t3.micro	2 Actions	2.56%
database-2	Available	Instance	MySQL Community	us-east-1c	db.t3.micro	2 Actions	2.85%
database-3	Available	Instance	MySQL Community	us-east-1c	db.t3.micro	-	-

Create the connection on MySQL Workbench



Fire the basic queries and create the table

#	Time	Action	Message	Duration / Fetch
2	10:48:41	CREATE TABLE STUDENTS (NAME VARCHAR(20))	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SC...	0.297 sec
3	10:48:45	CREATE TABLE STUDENTS (NAME VARCHAR(20))	Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SC...	0.297 sec
4	10:49:08	CREATE TABLE student.STUDENTS(NAME VARCHAR(20))	0 row(s) affected	0.391 sec
5	10:50:43	INSERT INTO student.STUDENTS (Name) value ('James')	1 row(s) affected	0.313 sec
6	10:51:01	CREATE TABLE student.STUDENTS(NAME VARCHAR(20))	Error Code: 1050. Table 'STUDENTS' already exists	0.297 sec
7	10:51:19	select * from student.STUDENTS LIMIT 0, 1000	1 row(s) returned	0.297 sec / 0.000 sec

A table having at least five rows must be visible

The screenshot shows the Oracle SQL Developer interface. In the top-left, the Navigator pane displays SCHEMAS with student selected. The top-right shows the SQLAdditions toolbar with a note: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help." The central area contains a Query Editor window with the query: "select * from student.STUDENTS;". Below it is a Result Grid showing the following data:

NAME
James
Mark
John
Tony
Thor

On the right, there's a sidebar with icons for Result Grid, Form Editor, and Field Types. At the bottom, the Session tab of the Information pane is open, showing the following session history:

Action Output	Time	Action	Message	Duration / Fetch
7 10:51:19	select * from student.STUDENTS LIMIT 0, 1000		1 row(s) returned	0.297 sec / 0.000 sec
8 10:52:31	INSERT INTO student.STUDENTS (Name) value ('Mark')		1 row(s) affected	0.297 sec
9 10:52:31	INSERT INTO student.STUDENTS (Name) value ('John')		1 row(s) affected	0.312 sec
10 10:52:31	INSERT INTO student.STUDENTS (Name) value ('Tony')		1 row(s) affected	0.297 sec
11 10:52:32	INSERT INTO student.STUDENTS (Name) value ('Thor')		1 row(s) affected	0.296 sec
12 10:52:46	select * from student.STUDENTS LIMIT 0, 1000		5 row(s) returned	0.297 sec / 0.000 sec