How Backup and Restore works in AWS RDS

Amazon Relational Database Service (Amazon RDS)

Amazon RDS is a managed service which we can use to launch and manage relational databases on AWS. It makes it easy to set up, operate, and scale a relational database in the AWS cloud , also provides cost-efficient, resizable capacity for an industry-standard relational database and manages common database administration tasks.

Amazon RDS supports 6 engines, PostgreSQL, MySQL, mariadb , oracledatabase , sqlserver and Amazon Aurora.

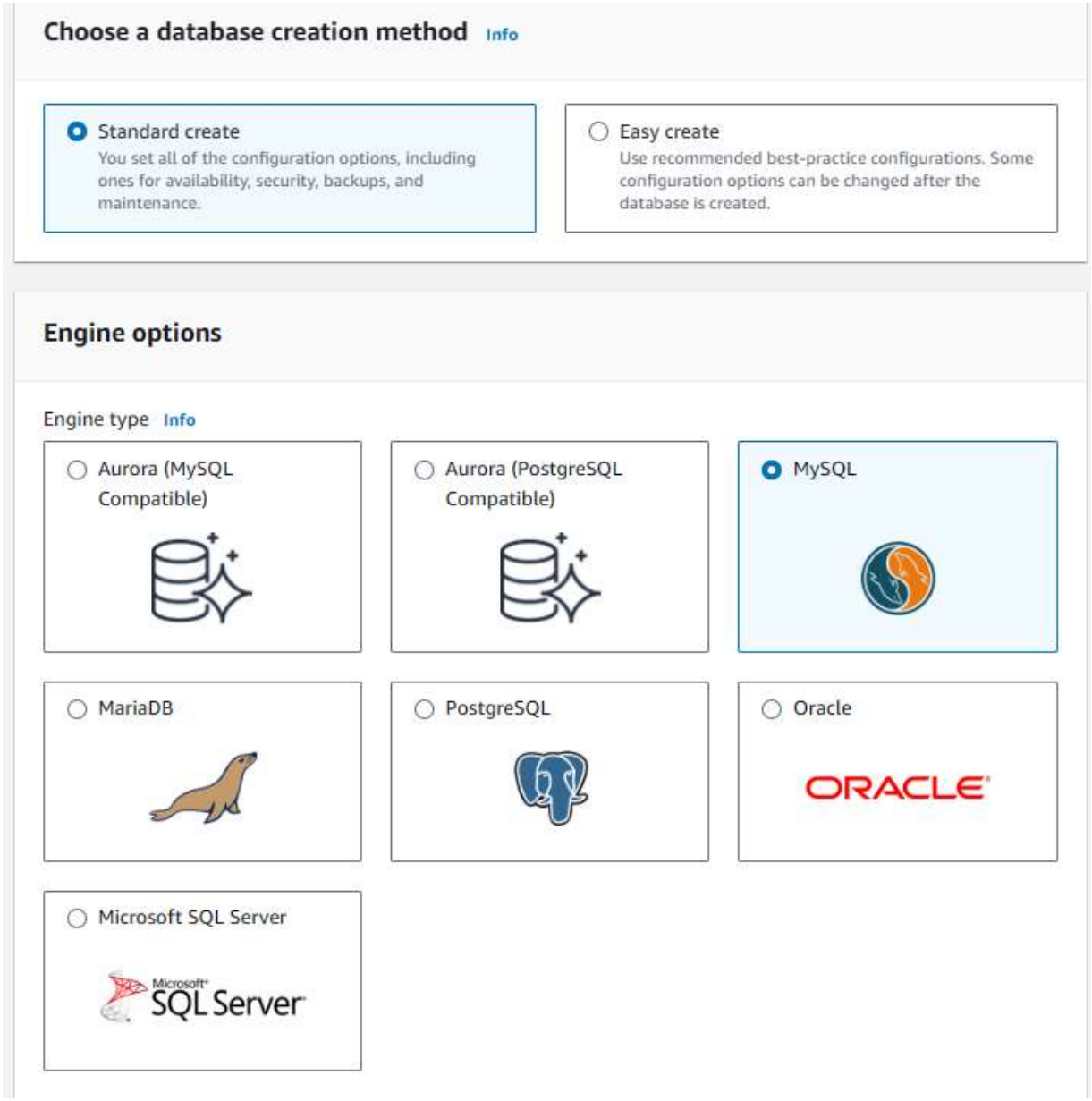
Here we're going to do the lab on MySQL.

Amazon RDS is an example for Relational database which stores data in a tabular format with rows and columns and uses sql query language to query the data. Each field in the table represents a data value , rows contain records and columns with attributes. It enables developers to define database's schema , relations and constraints between rows and columns. Highly structured and having more data accuracy and consistency.

Let's get started in the lab....!!!

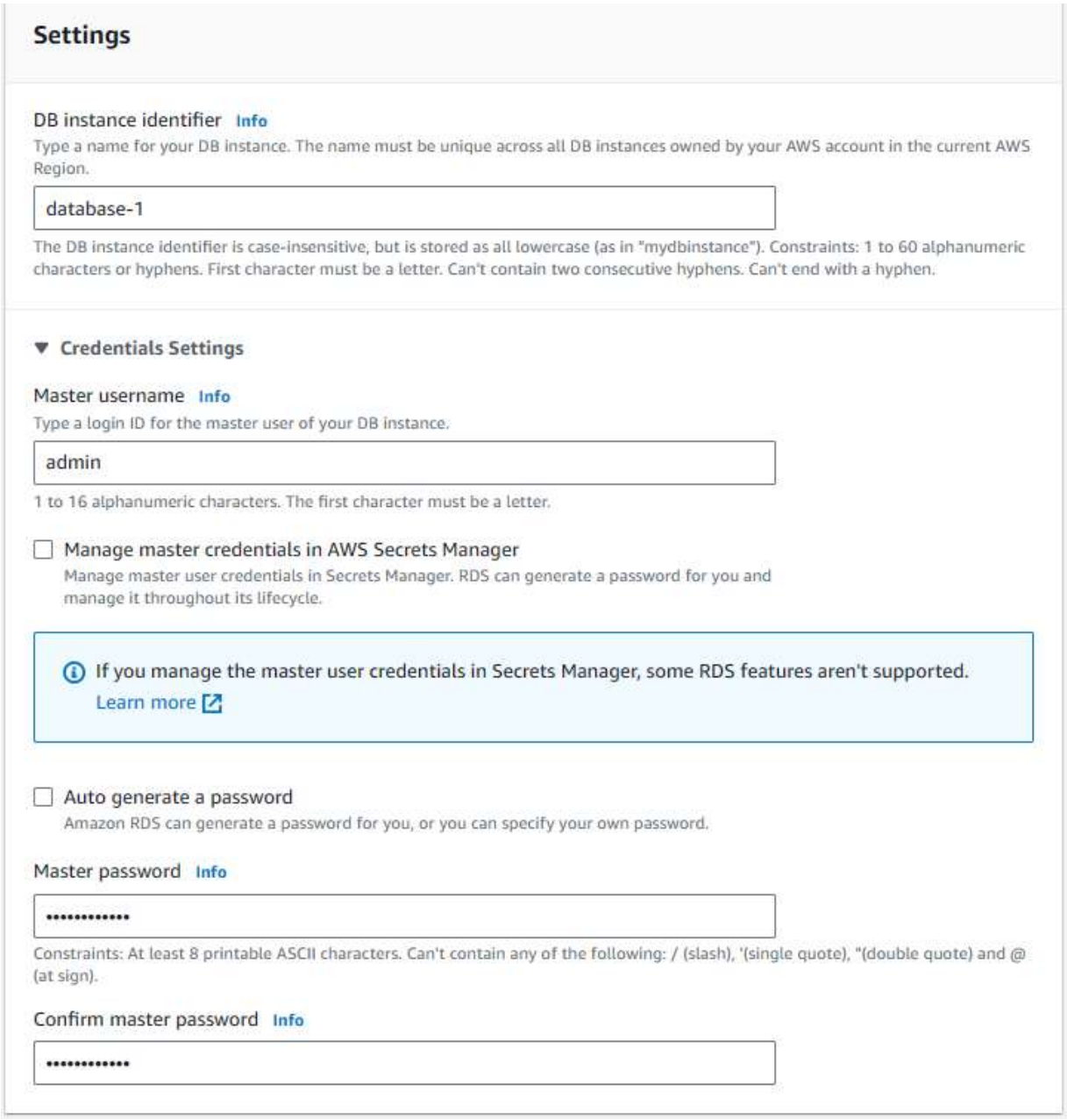
Search for RDS from AWS console and click on create Database.

Then follow the steps shown below : select MySQL

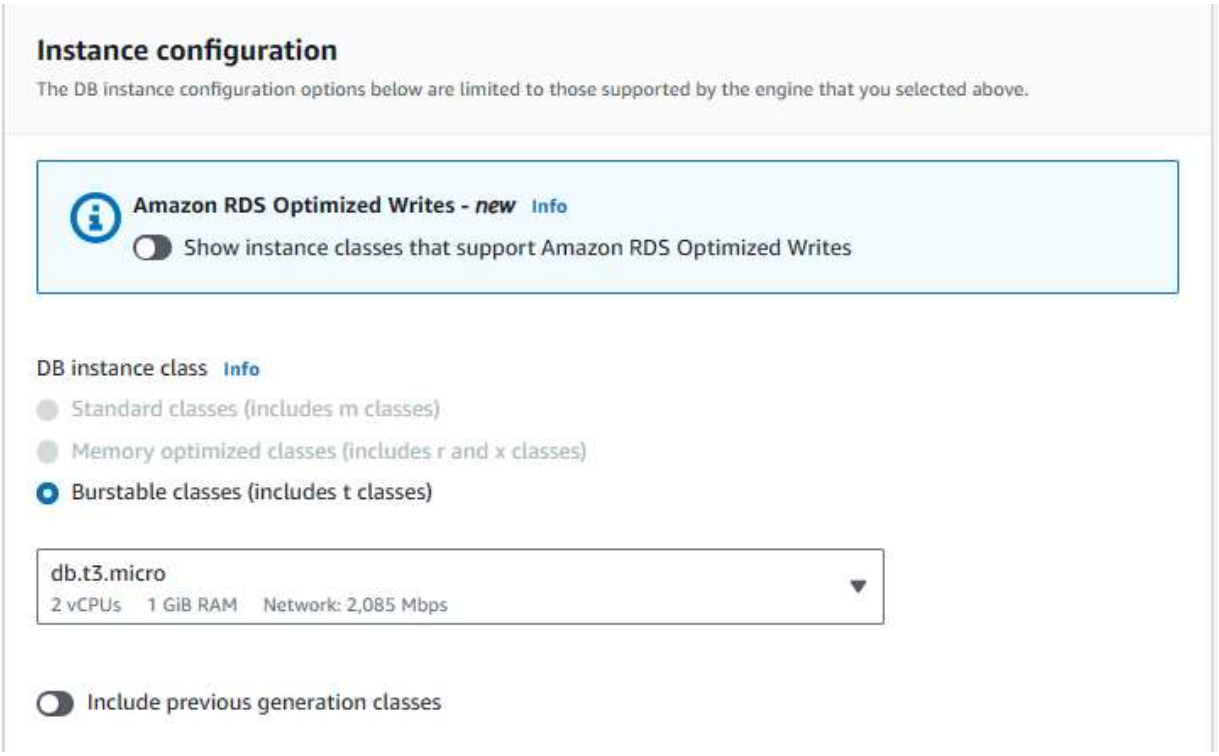


Select Free-tier

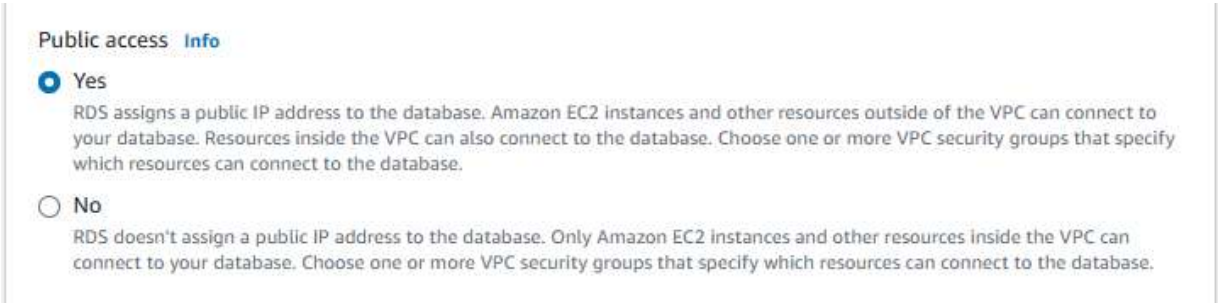
Provide Database Identifier name and Password’



Select Instance configuration as Burstable classes

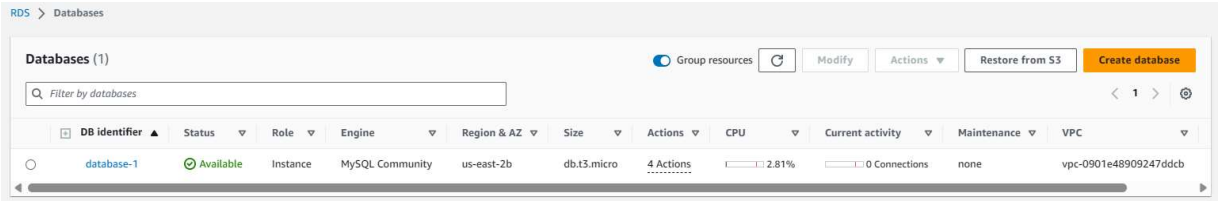


Enable the public access from Connectivity



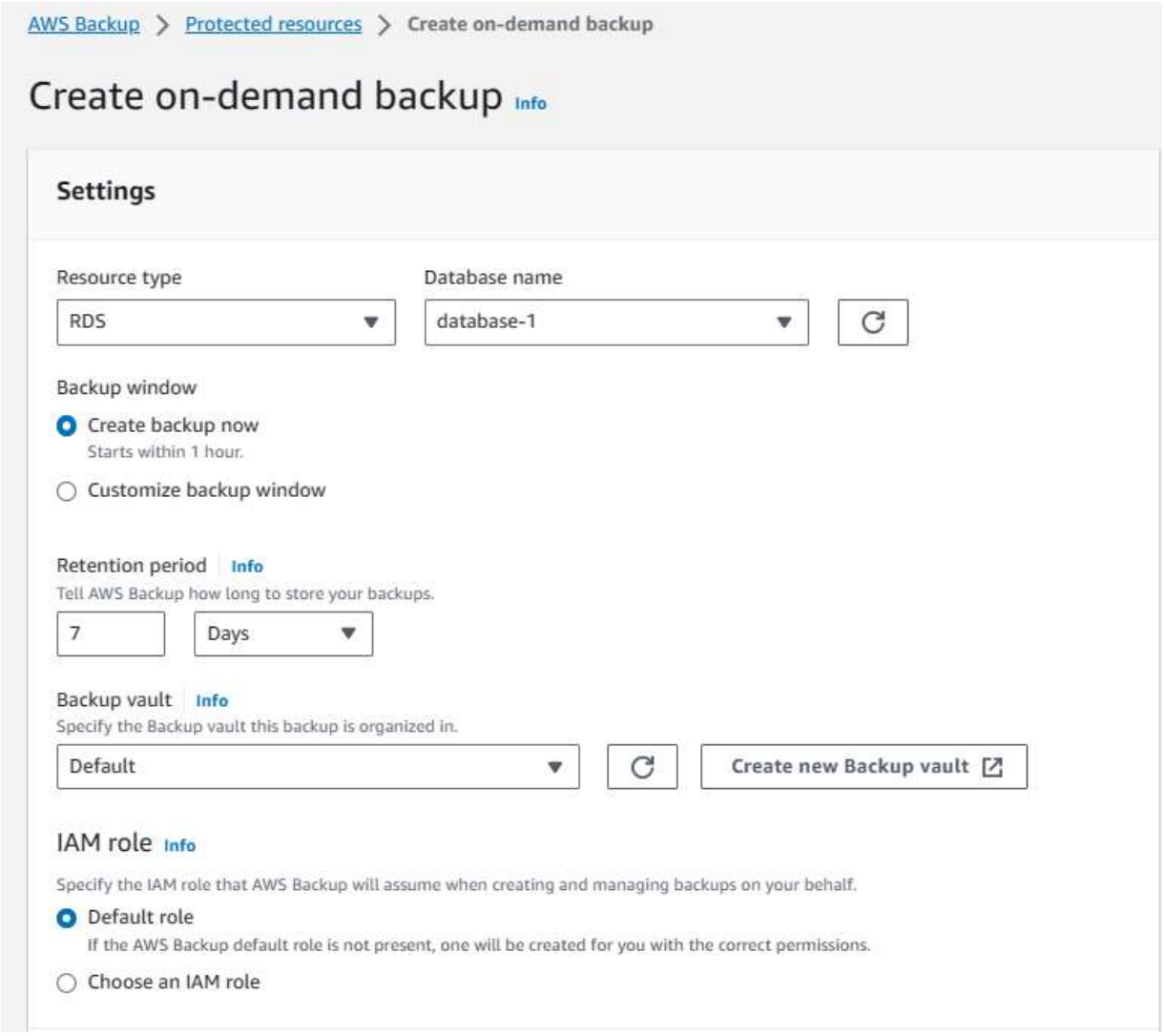
All the other settings are default and click on create database.

Once the newly created DB status showing as available , go to AWS console and search for AWS Backup.

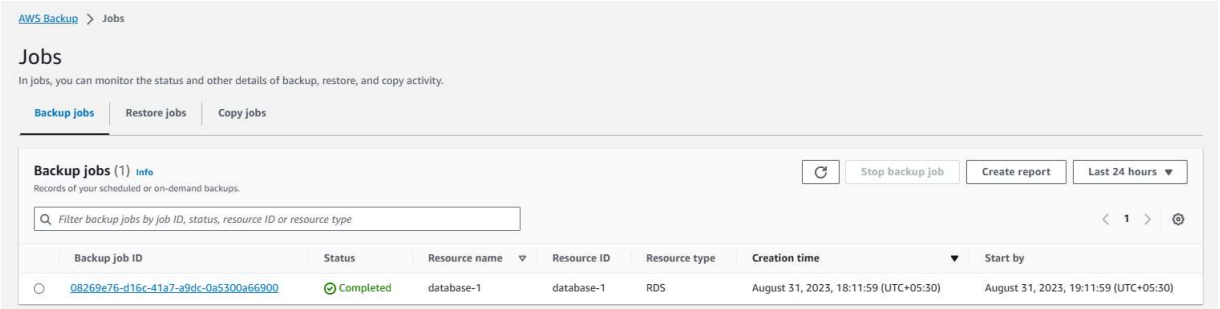


Goto Protected resources from LHS and click on Create on-demand backup.
Select the Resource type as RDS and select the DB name which we created from Database name.

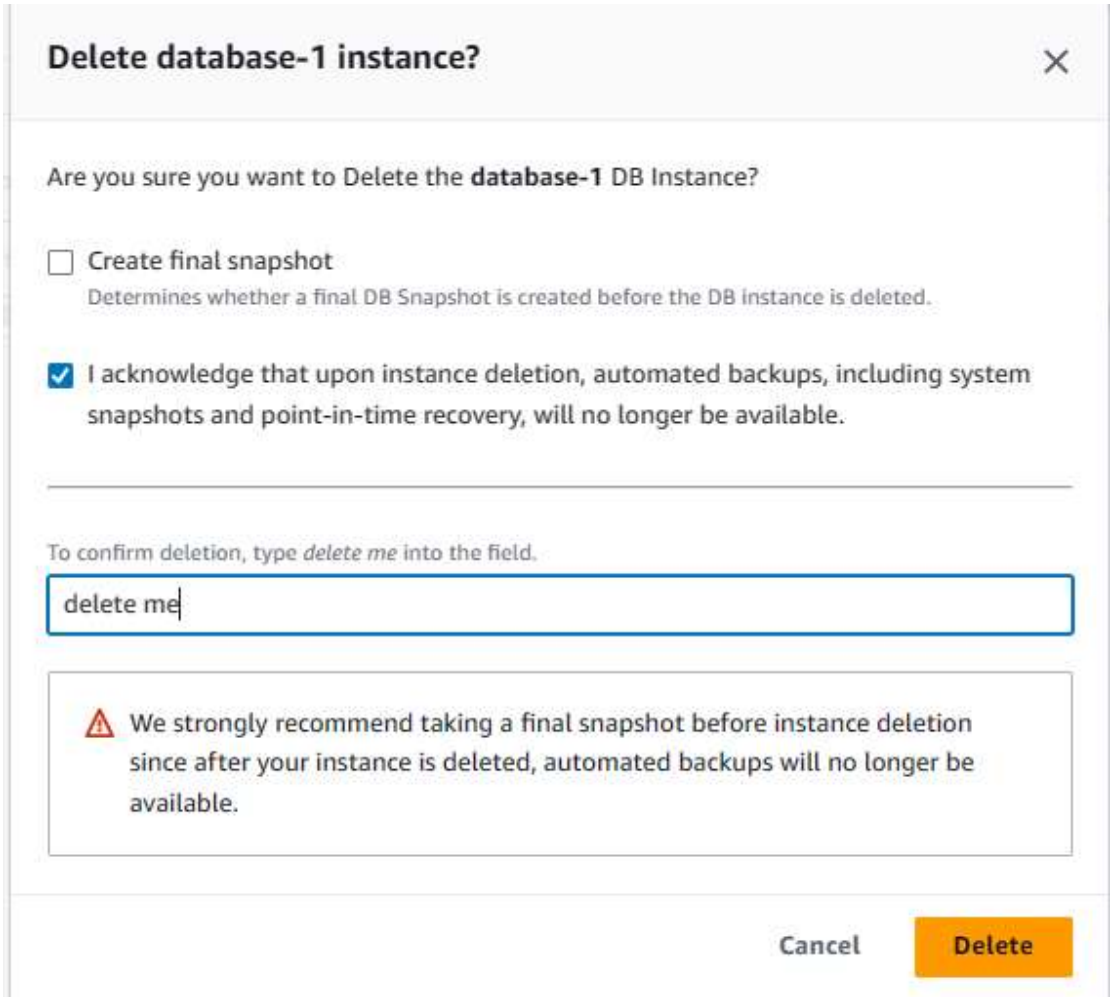
Here I'm selecting a retention period as 7 days, you can choose it on your choice. Rest all settings are default and click on Create on-demand backup.



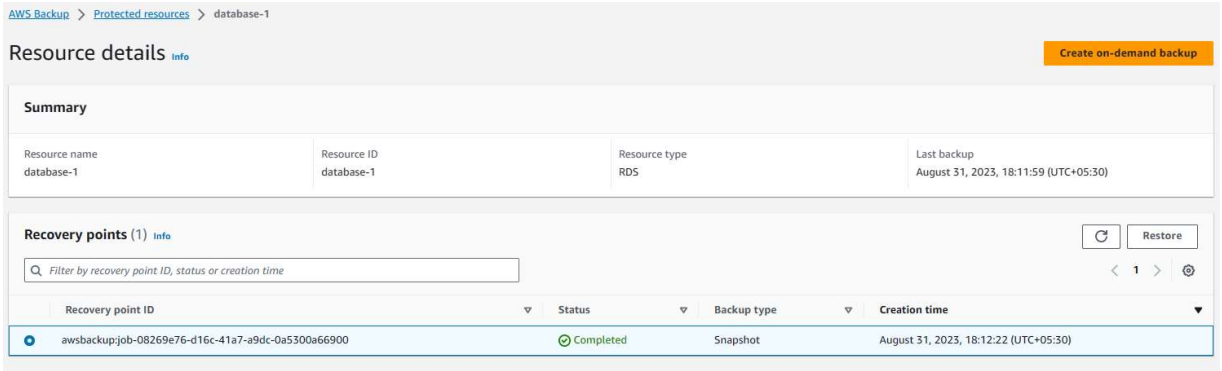
We can refresh the Jobs page and check the backup status, here we can see the backup is completed:



Now we're going to delete the database from RDS : select the database → Actions → Delete

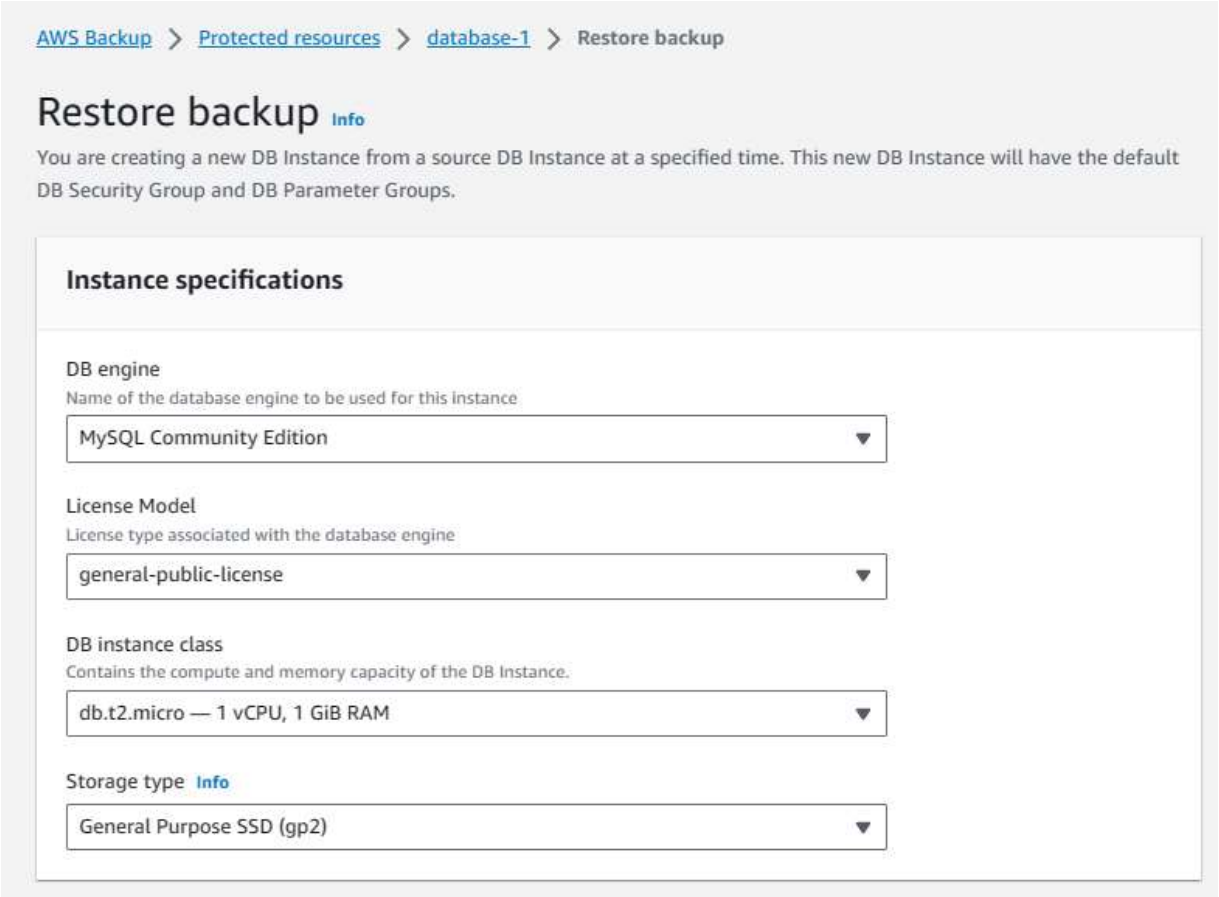


Once the database is deleted , goto AWS Backup → Protected Resources → select the database and → click on Restore

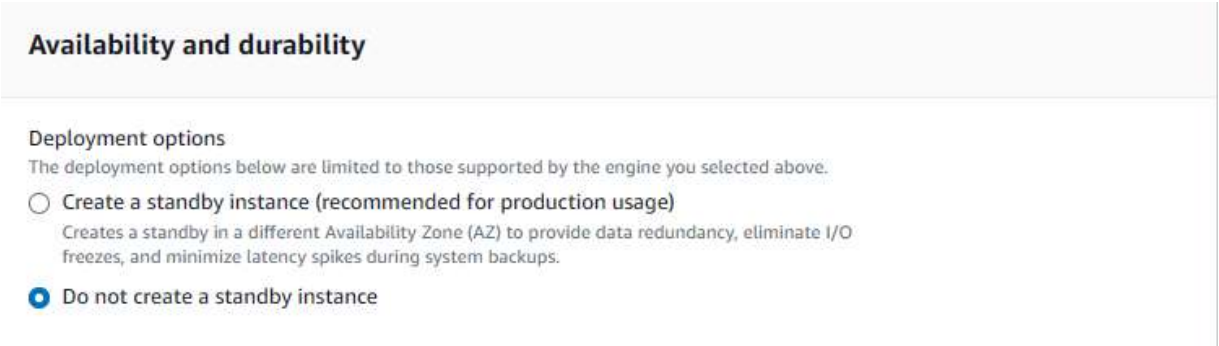


It will take sometime to complete the process.

Select the DB instance class as db.t2 micro and rest all fields as default



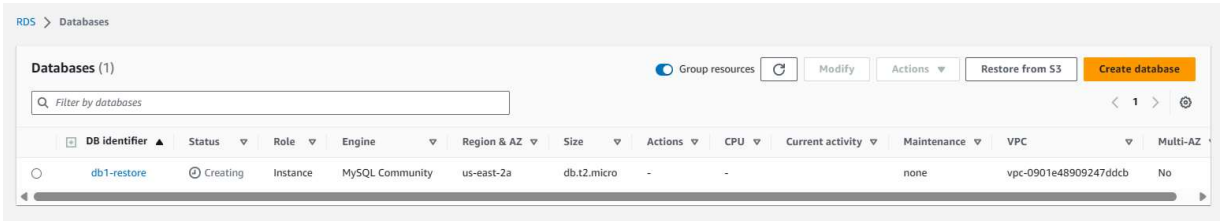
Select “ Do not create Standby instance “ option . The other option is only recommends for if we’re using RDS for production usage.



Enable public access from Network and Security settings and click on Restore backup.

All other settings are left as it is. We will get a restore job ID like below:

Go to RDS page and select Databases there , we can see the newly created restore database there:



Once the restore is completed , go to RDS→ Databases → and delete db1-restore.

Then go to AWS Backup → Backup vaults , we could see the restoration is completed

This is how backup and restore works in AWS.

Enjoy your learning…!!!