

# Task #8 – RDS


## What to do


1. Create an RDS instance in one of the DB subnets of your VPC. **WARNING: Select a free-tier eligible engine option.**


Select engine

Engine options


☐ Amazon Aurora  
Amazon Aurora

☒ MySQL  


☐ MariaDB  


☐ PostgreSQL  


☐ Oracle  
ORACLE

☐ Microsoft SQL Server  


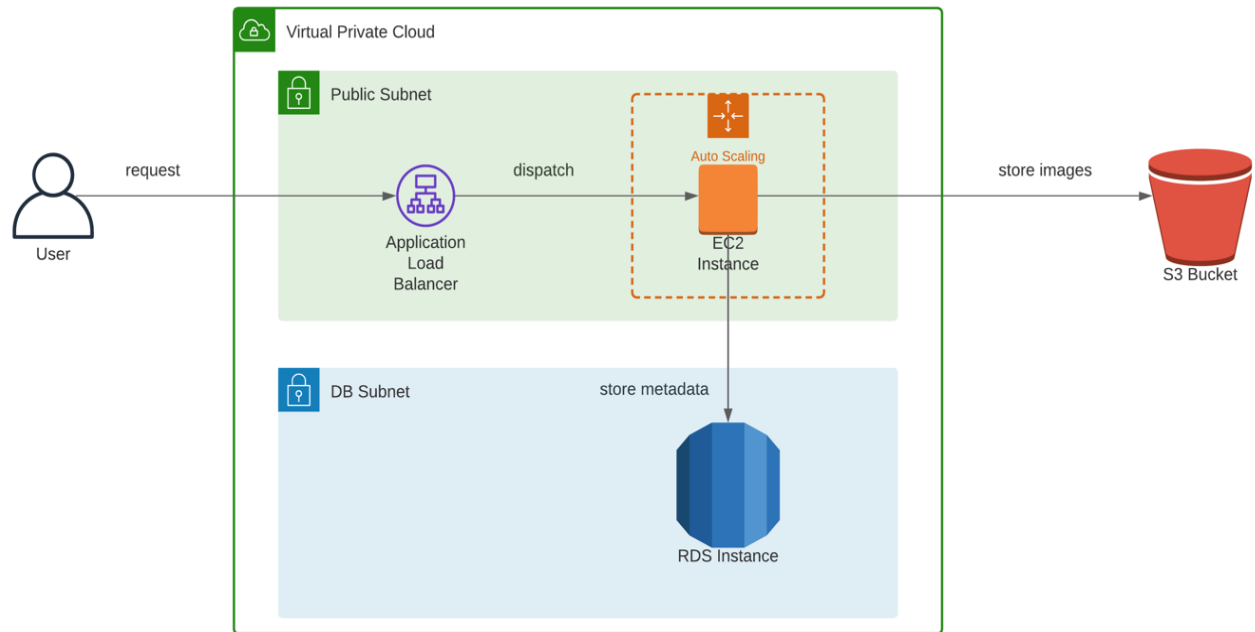
**MySQL**  
MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 16 TB.
- Instances offer up to 32 vCPUs and 244 GiB Memory.
- Supports automated backup and point-in-time recovery.
- Supports cross-region read replicas.

☒ Only enable options eligible for RDS Free Usage Tier [info](#)CancelNext

2. Update your web application to include the following functions:
  - a. download an image by name
  - b. show metadata for the existing images
  - c. upload an image
  - d. delete an image by name
  - e. get metadata for a random image
3. After uploading some images, make some SQL queries to the RDS instance bypassing the web-application – for example, from the EC2 instances over SSH.
4. The image metadata should include last update date, name, size in bytes, and file extension.

5. The overall infrastructure should look like this:



6. Ensure the following non-functional criteria are met:
  - a. the EC2 instance should use IAM roles to access RDS/S3
  - b. the EC2 instance should claim the role using the [AWS credentials provider chain](#)
7. Optional: use AWS Identity and Access Management (IAM) database authentication to connect your application to the DB instance.

*\* Optional Task is not mandatory for completion this module but highly recommended, if you don't have a time to complete it - just skip it*

## What should I remember?

1. **Once you create AWS Account -> Setup Multi-factor Authentication**
2. **Do NOT share your account**
3. **Do NOT commit your account Credentials into the Git**
4. **Terminate/Remove all created resources/services once you finish Module**
5. **Please Do not forget to delete NAT Gateway if you used it.**
6. **Do NOT keep instance running if you don't use it**
7. **Carefully keep track of billing and working instances so you don't exceed limits**