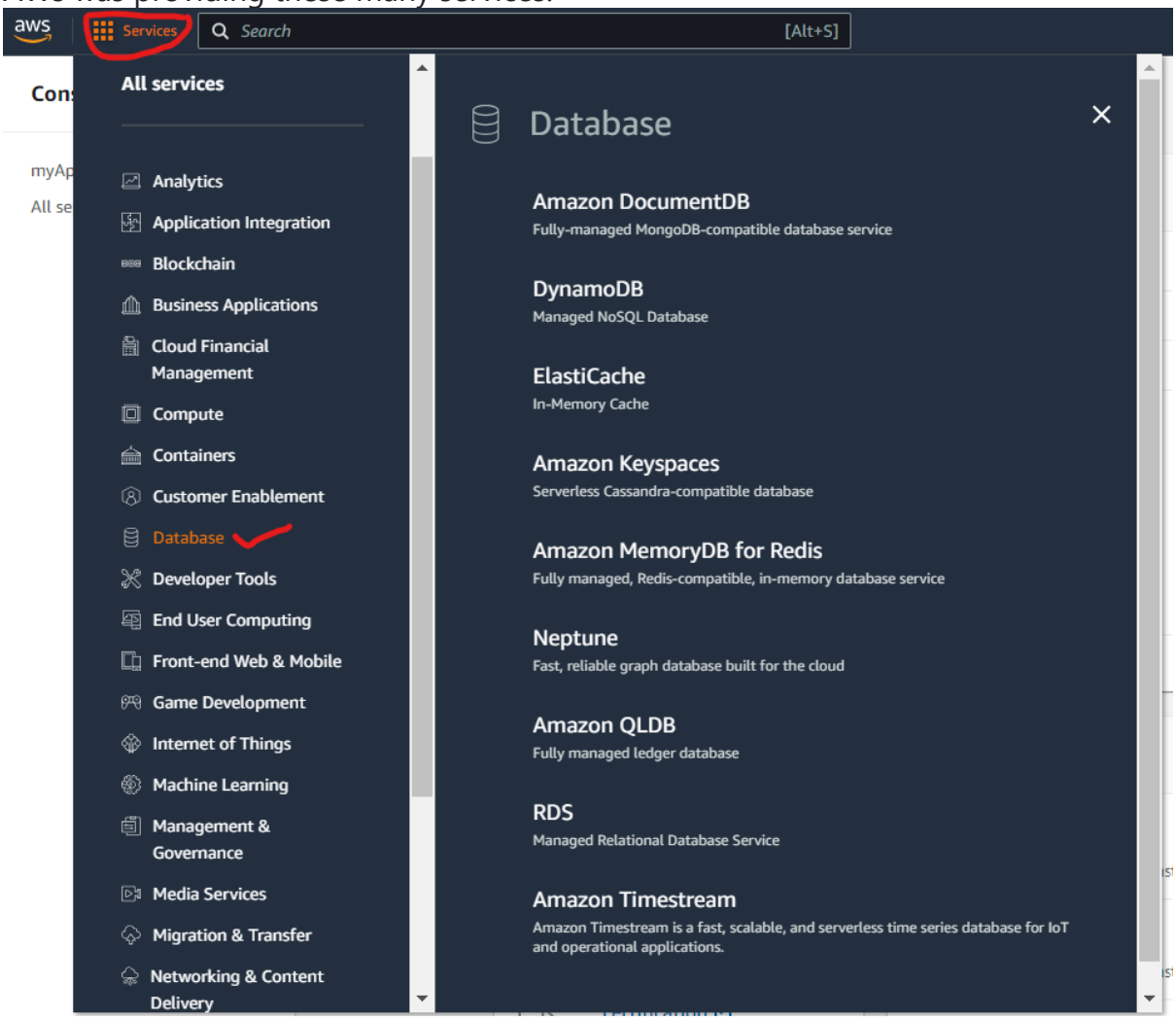
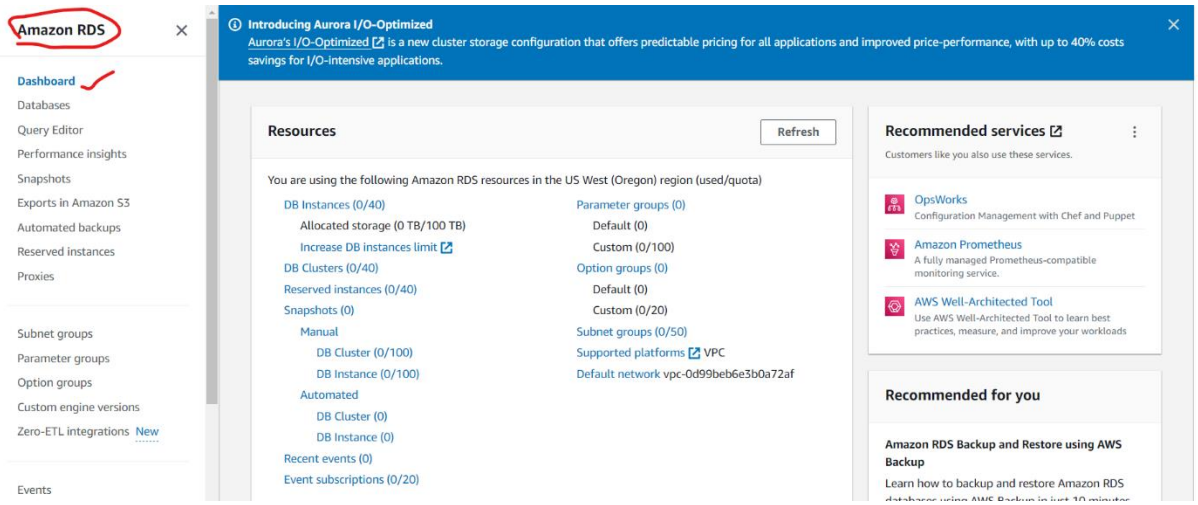
Aws RDS Connecting to PostgreSQL:

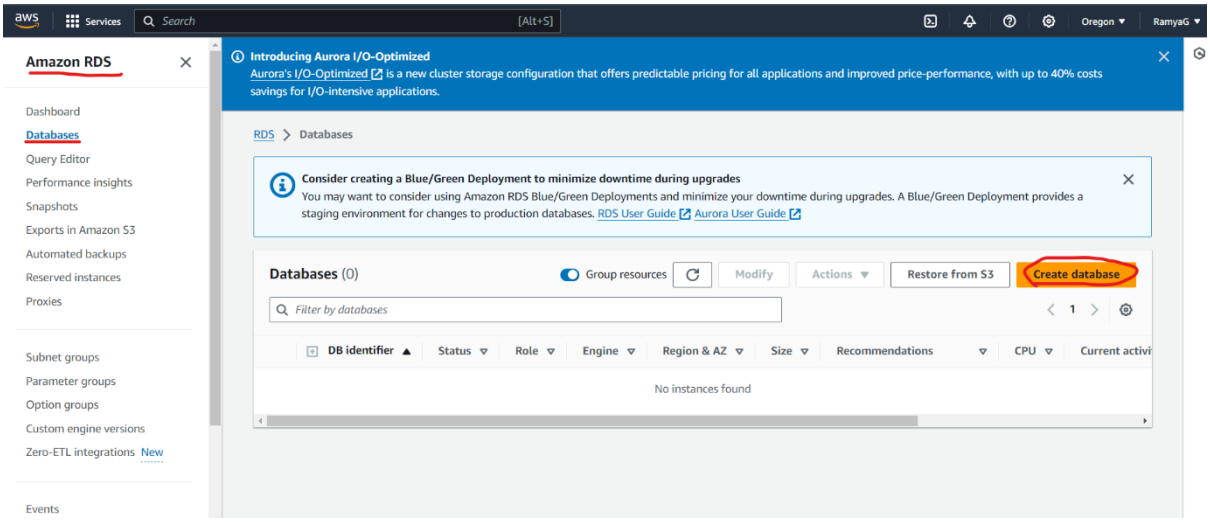
What are the Databases services provided by AWS?

- AWs was providing these many services.



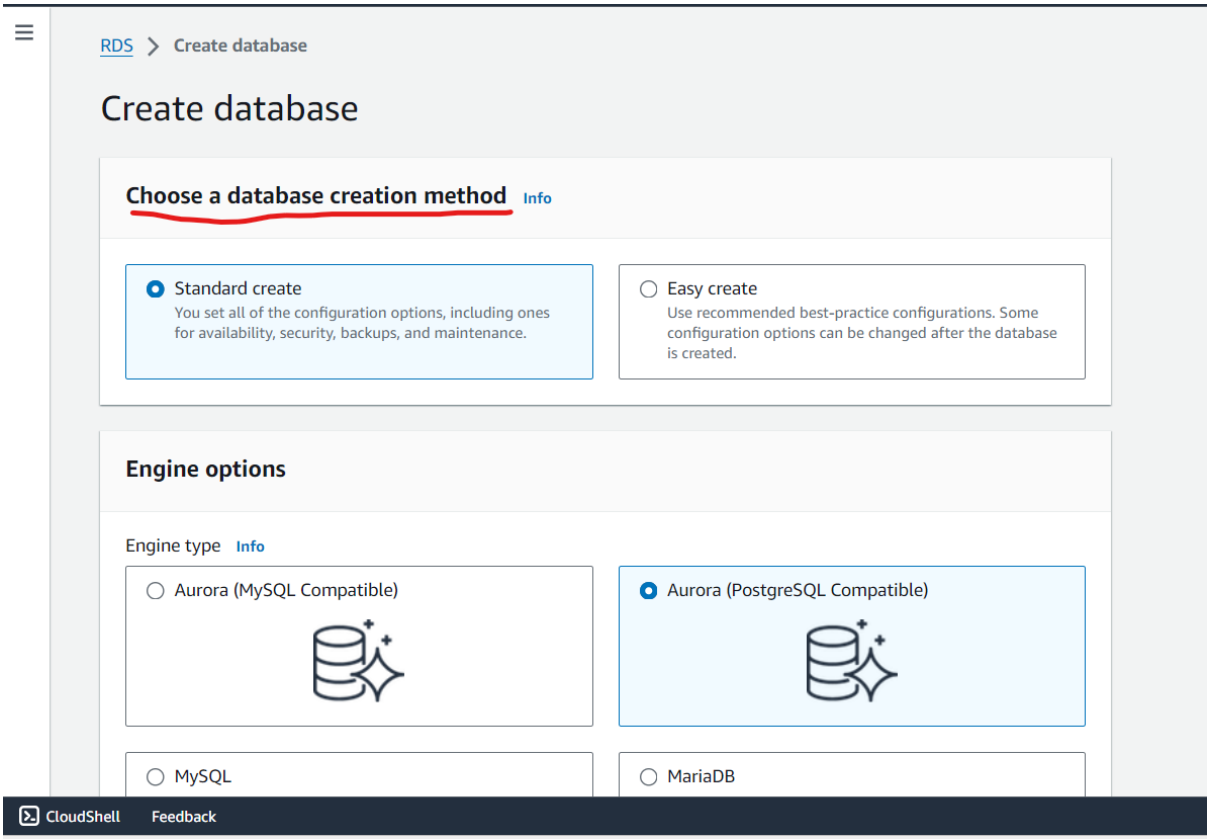


- Lets create our first database

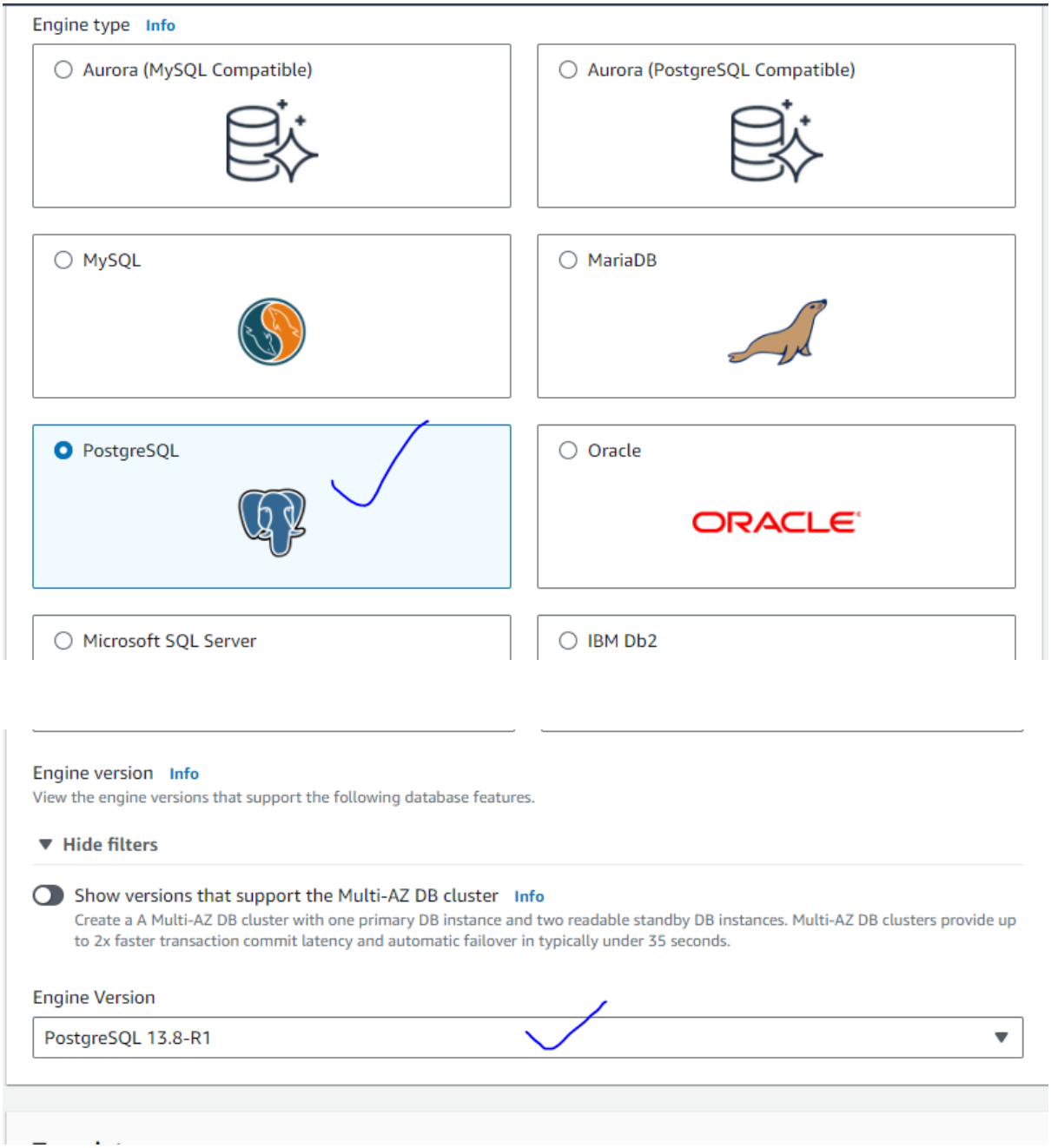


  - Choose a database creation method.

ii. **Standard create**



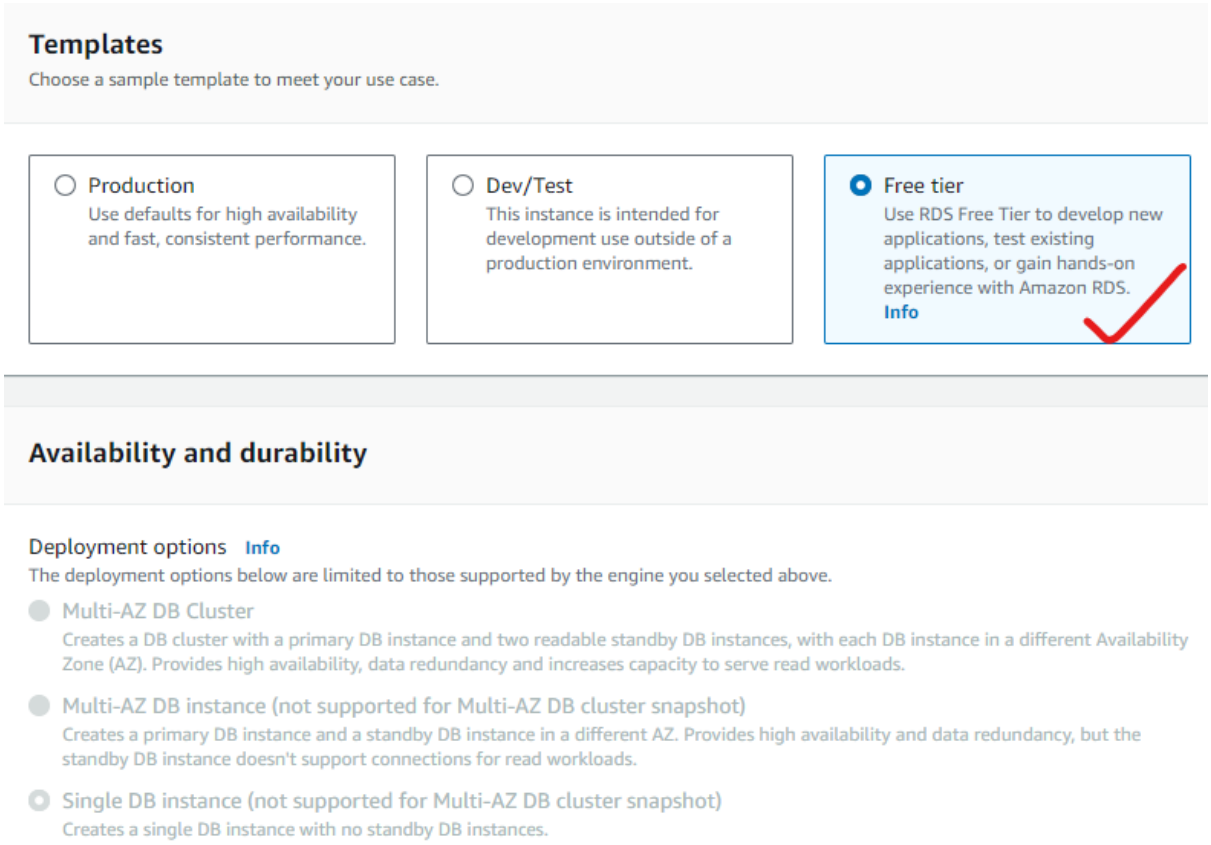
  - Engine Options
    - Engine type
    - Engine version


Engine type Info
Aurora (MySQL Compatible)
Aurora (PostgreSQL Compatible)
MySQL
MariaDB
PostgreSQL
Oracle
ORACLE
Microsoft SQL Server
IBM Db2

Engine version Info
View the engine versions that support the following database features.
Hide filters
Show versions that support the Multi-AZ DB cluster Info
Create a A Multi-AZ DB cluster with one primary DB instance and two readable standby DB instances. Multi-AZ DB clusters provide up to 2x faster transaction commit latency and automatic failover in typically under 35 seconds.
Engine Version
PostgreSQL 13.8-R1

Templates

Free
tier



Settings

DB instance identifer

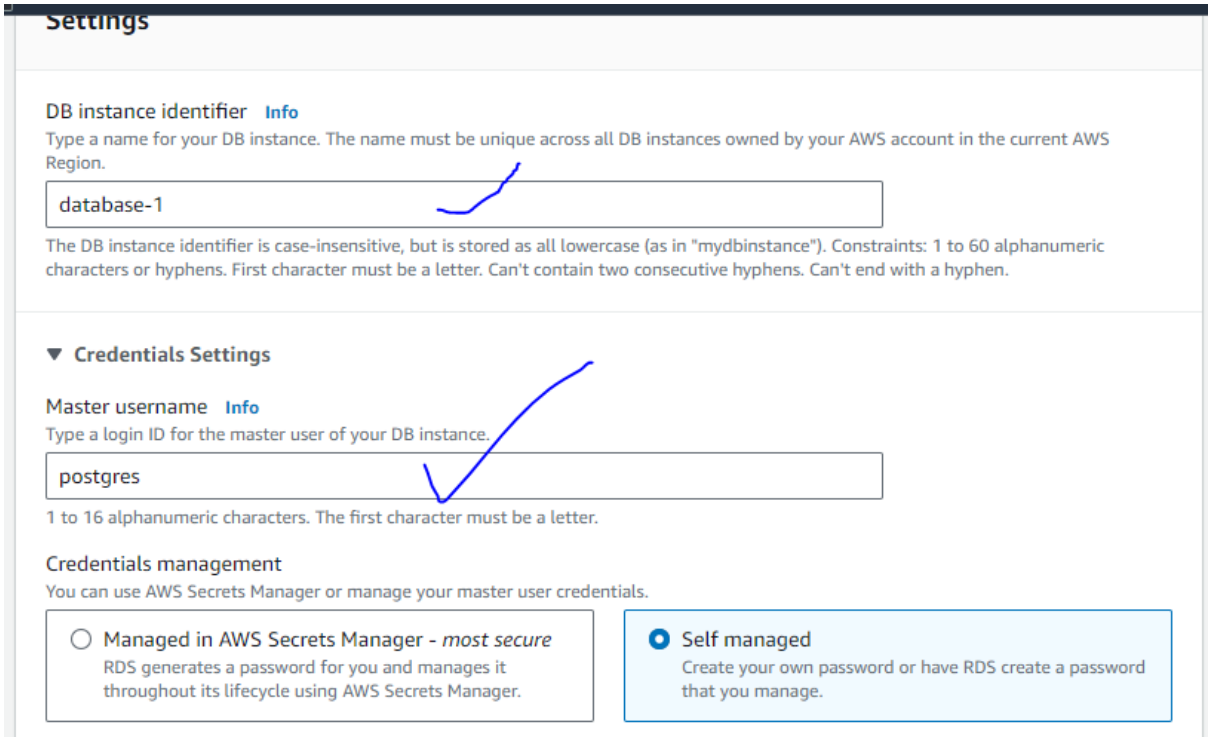
We need to give name for the DB instance

Credentials Settings

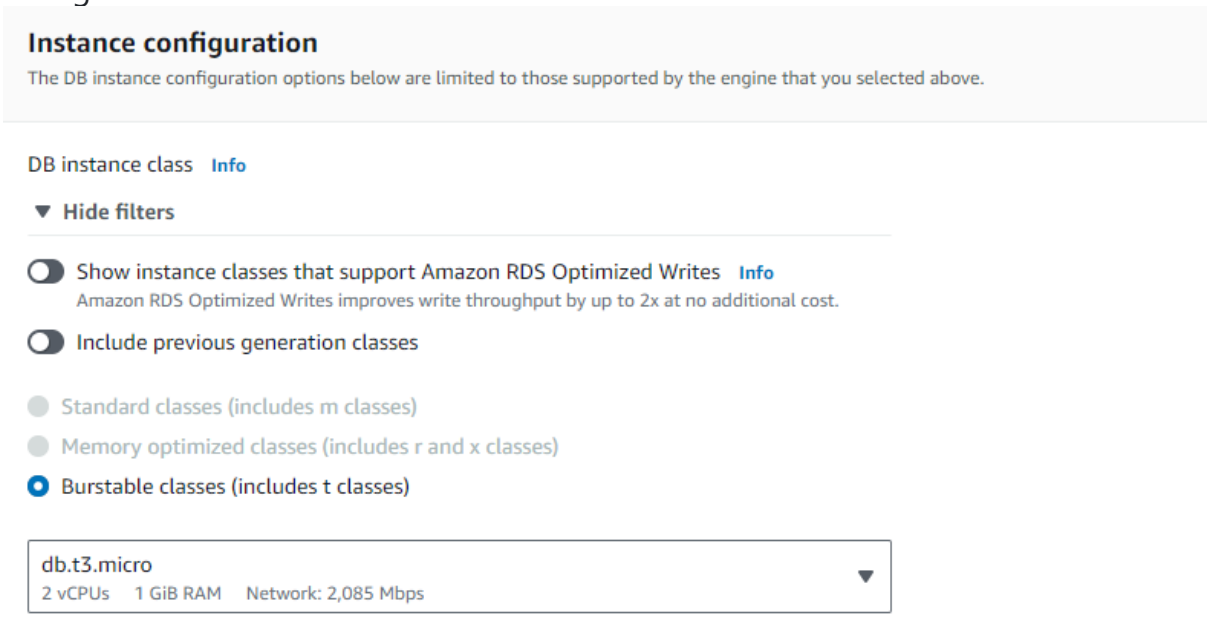
Master username

Credentials management

Master password

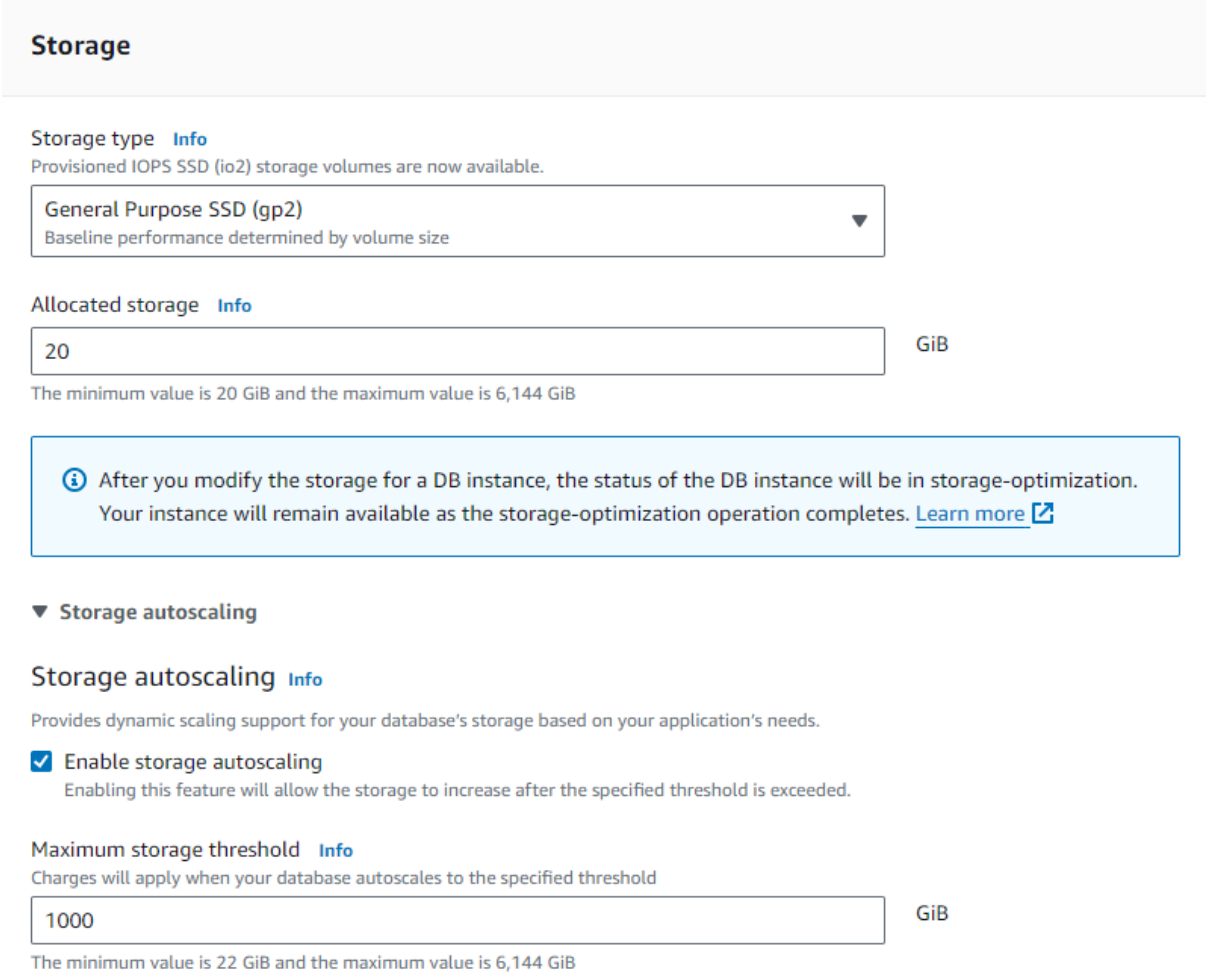


- Instance configuration

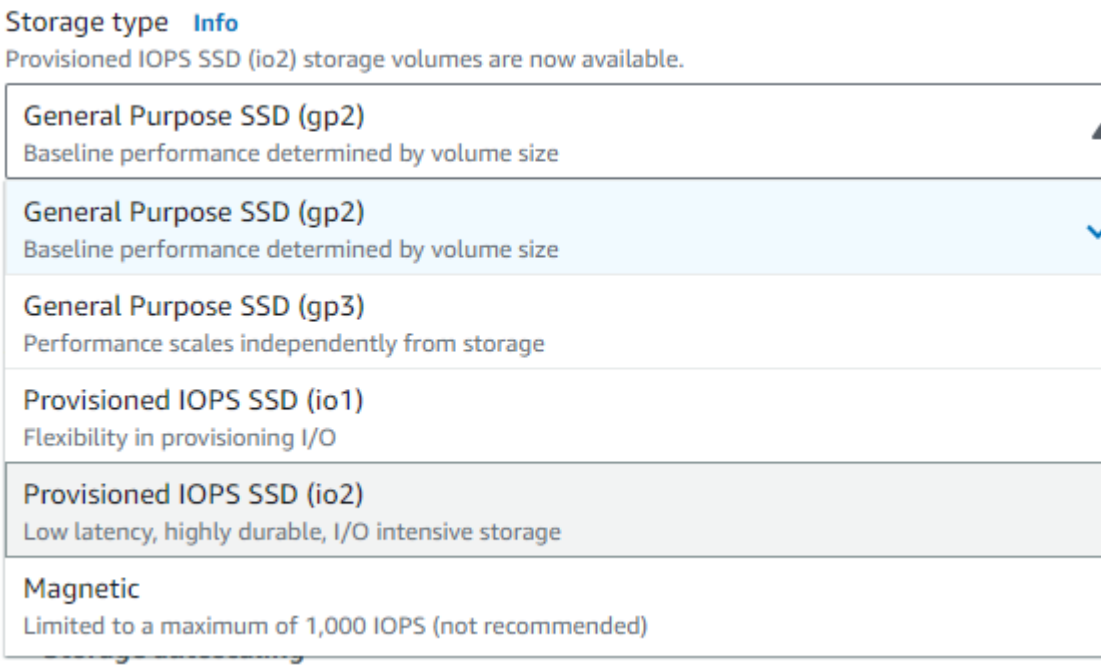


  - Standard Classes
    - Standard instances provide a balance of compute, memory, and network resources. They are a good choice for many database workloads.
  - Memory optimized classes
    - Memory optimized instances accelerate performance for workloads that process large data sets in memory.
  - Burstable classes

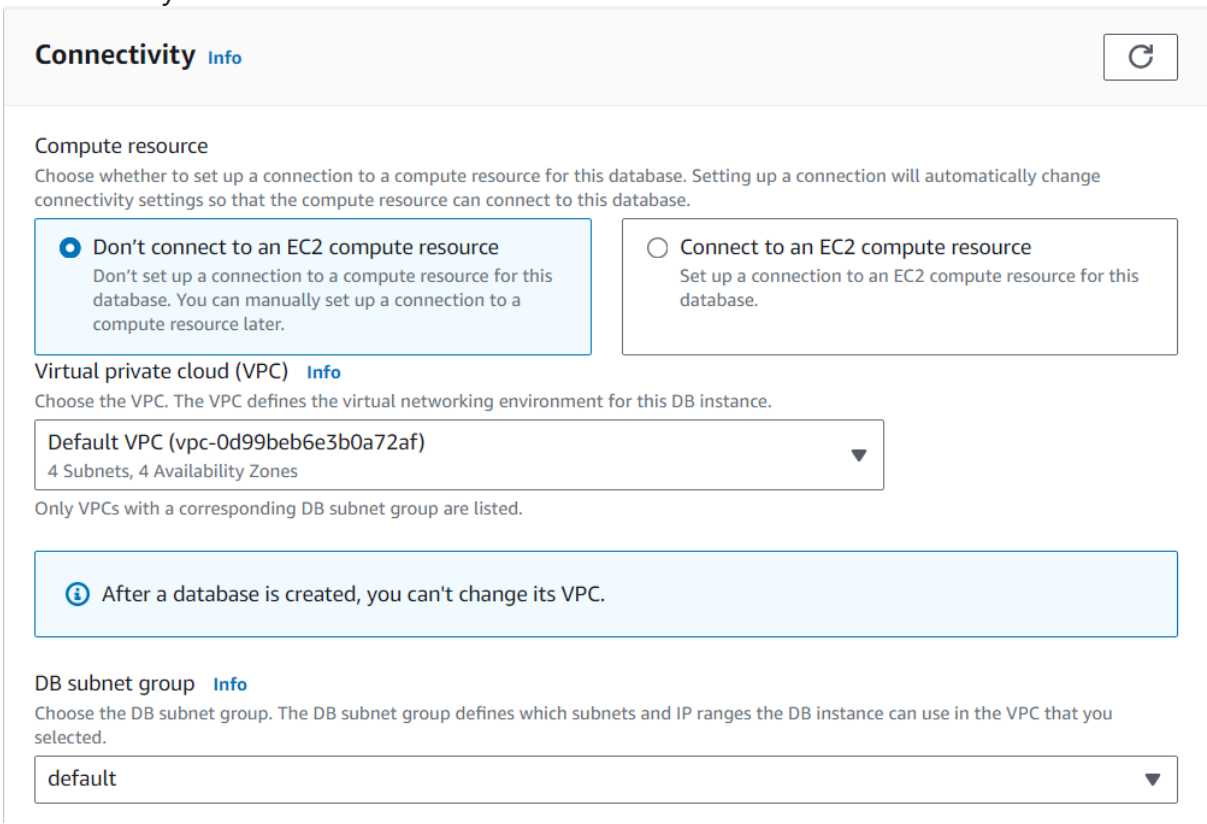
        - Burstable performance instances provide a baseline level of CPU performance with the ability to burst above the baseline.
- Storage

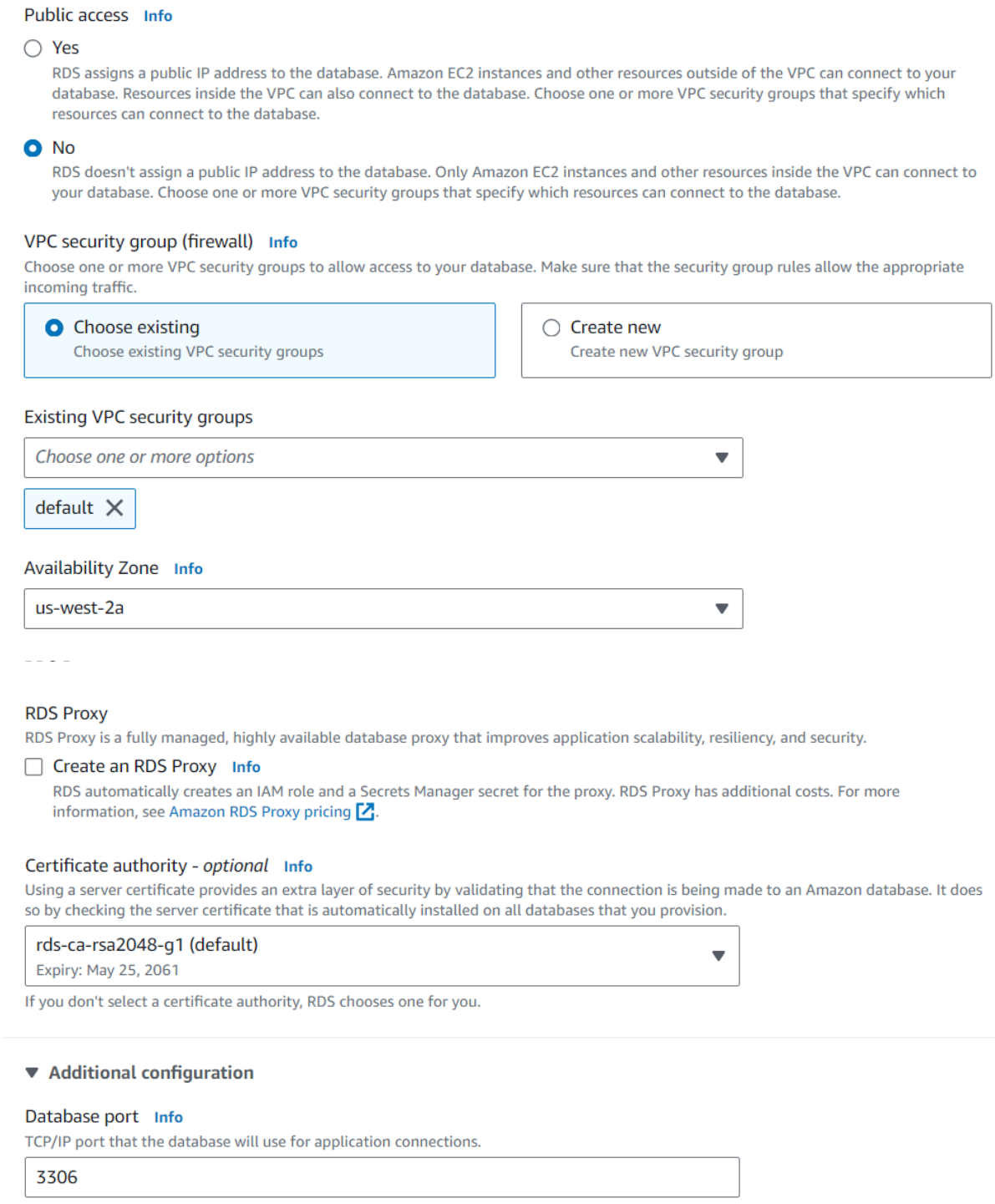


- Storage type



  - Allocated storage
  - Storage autoscaling
- Connectivity

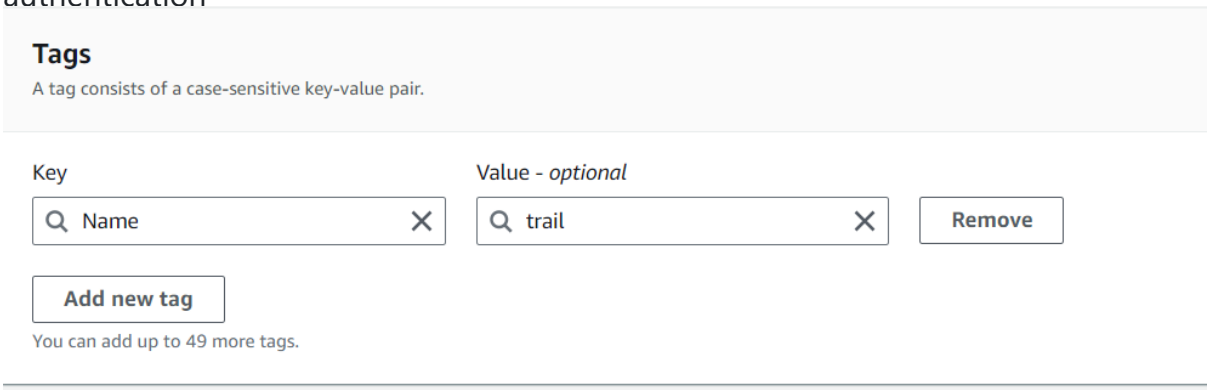


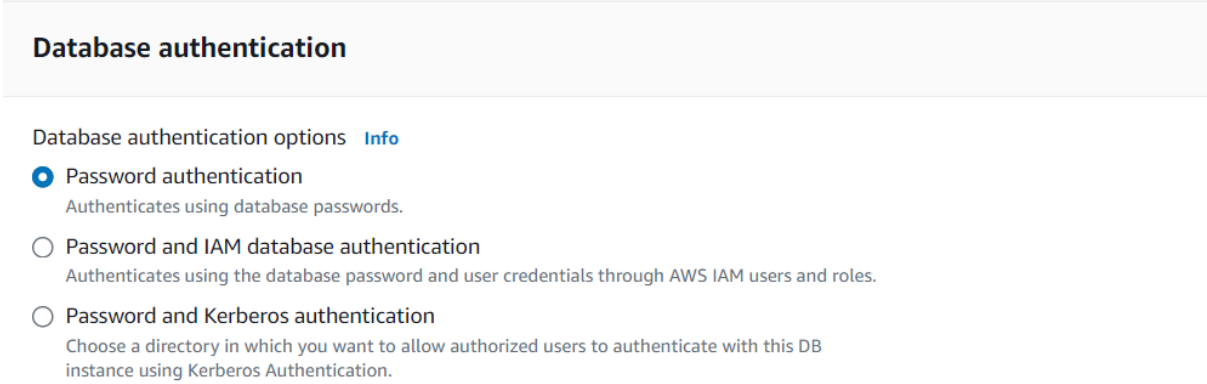


- RDS Proxy
  - RDS Proxy allows your applications to pool and share database connections to help them scale. An RDS proxy simplifies connection management and makes applications more resilient to database failures.

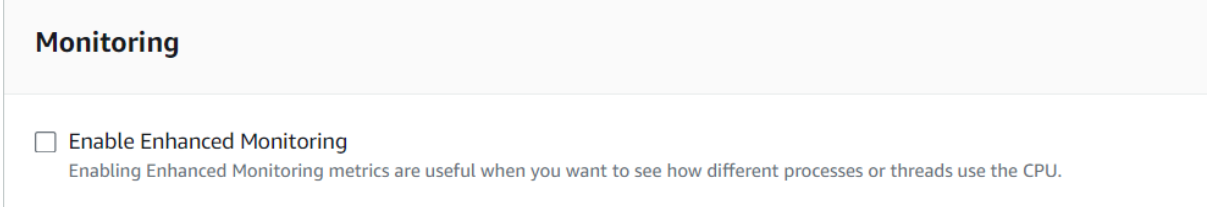
- Tags

- Database authentication





  - Password authentication
    - Manage your database user credentials through your DB engine's native password authentication features.
  - Password and IAM database authentication
    - Manage your database user credentials through your DB engine's native password authentication features and IAM users and roles.
  - Password and Kerberos authentication
    - Manage your database user credentials through your DB engine's native password authentication features and an AWS Managed Microsoft AD created with AWS Directory Service.
- Monitoring



- Additional configuration

Additional configuration

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

Database options

Initial database name Info

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 retention period Info

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

1 day

Backup window Info

The daily time range (in UTC) during which RDS takes automated backups.

- ○ Choose a window
- ◉ No preference

☑ 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.

Encryption

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

520261045384

KMS key ID

alias/aws/rds

Log exports

Select the log types to publish to Amazon CloudWatch Logs

- Audit log
- Error log
- General log
- Slow query log

IAM role

The following service-linked role is used for publishing logs to CloudWatch Logs.

RDS service-linked role

Maintenance

Auto minor version upgrade **Info**

Enable auto minor version upgrade

Enabling auto minor version upgrade will automatically upgrade to new minor versions as they are released. The automatic upgrades occur during the maintenance window for the database.

Maintenance window **Info**

Select the period you want pending modifications or maintenance applied to the database by Amazon RDS.

- Choose a window
- No preference

Deletion protection

Enable deletion protection

Protects the database from being deleted accidentally. While this option is enabled, you can't delete the database.

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.

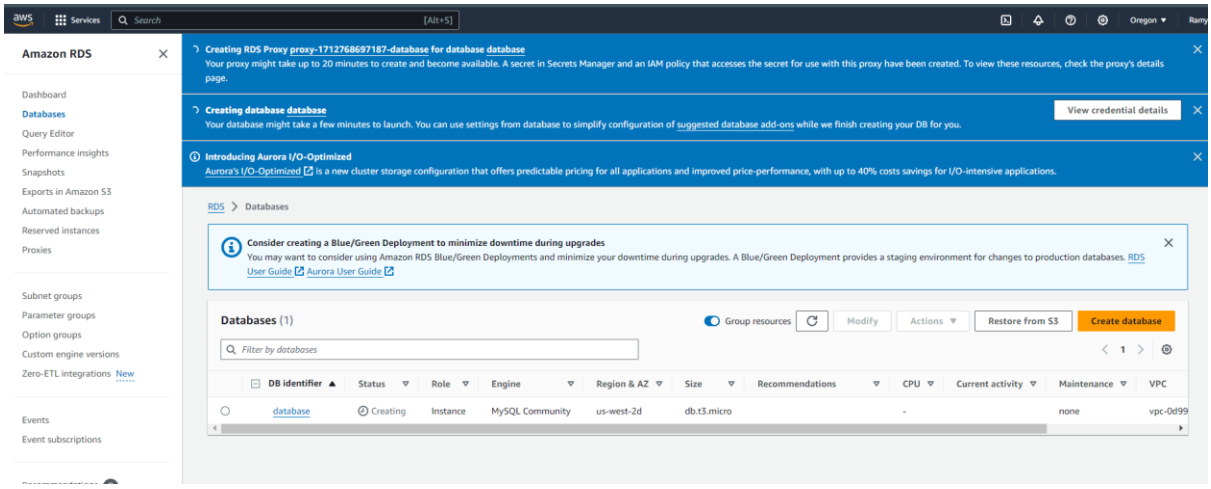
Learn more about AWS Free Tier.

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.

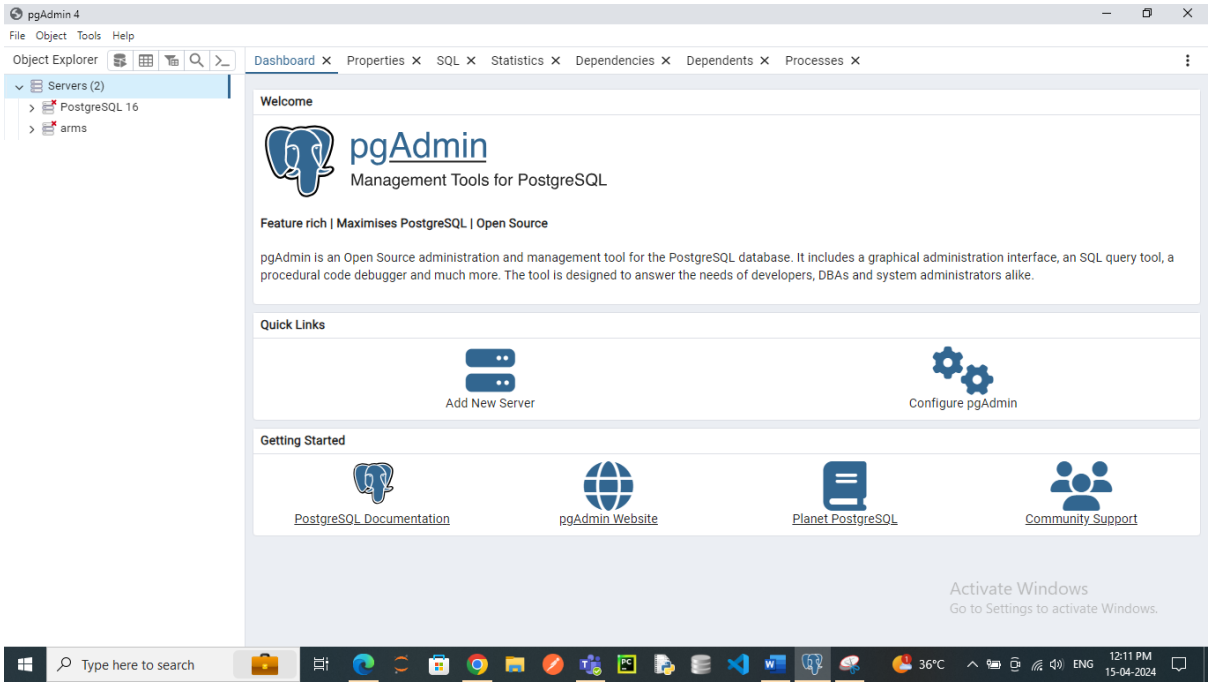
You are responsible for ensuring that you have all of the necessary rights for any third-party products or services that you use with AWS services.

Cancel **Create database**

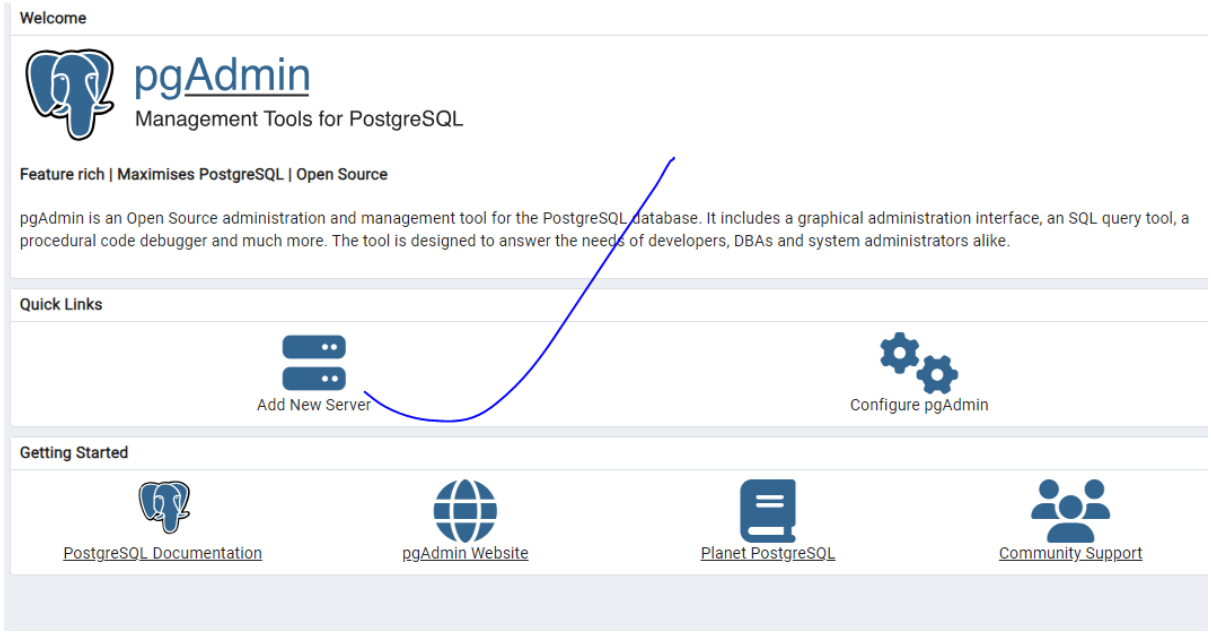
Creating the AWS RDS Instance



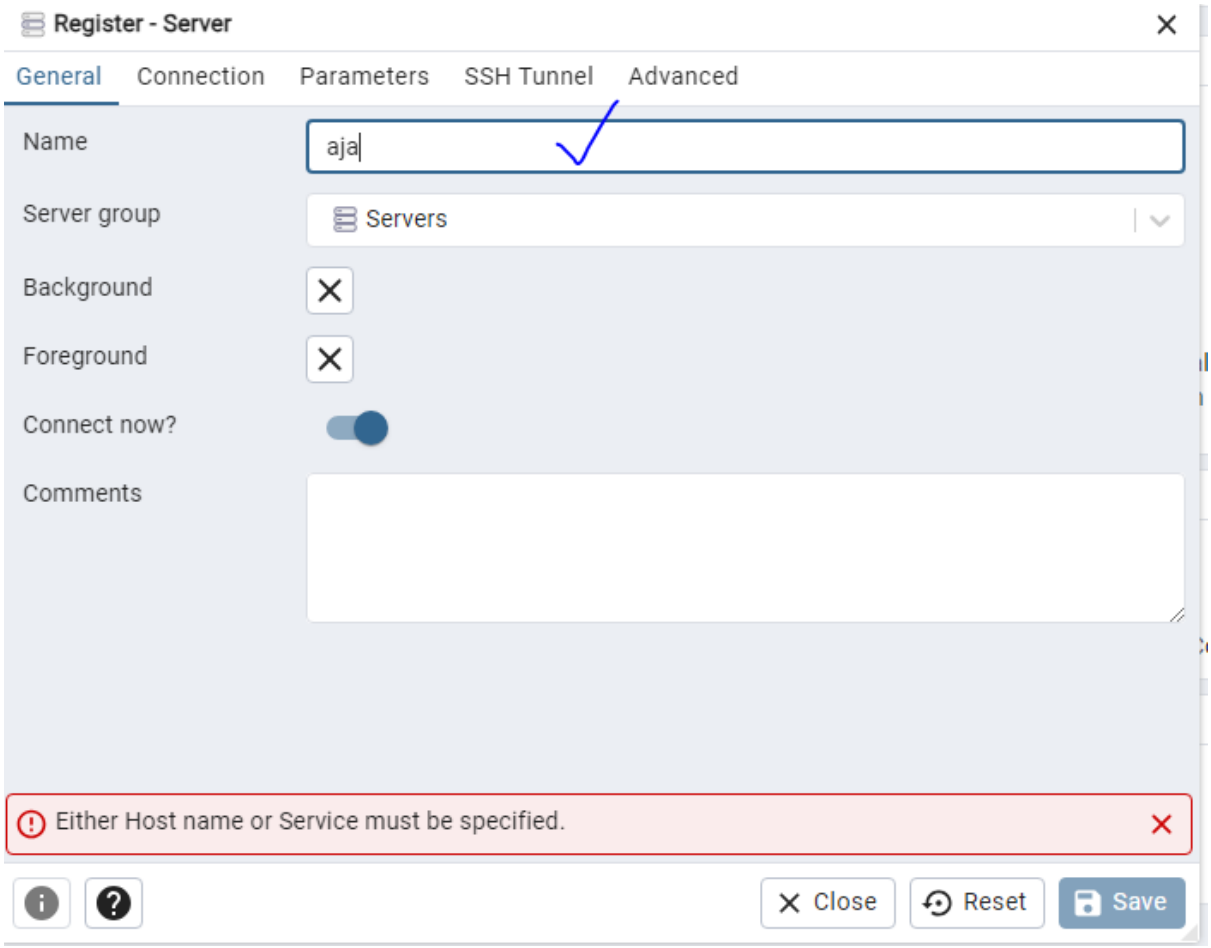
Open pgadmin :



Click on Add new server

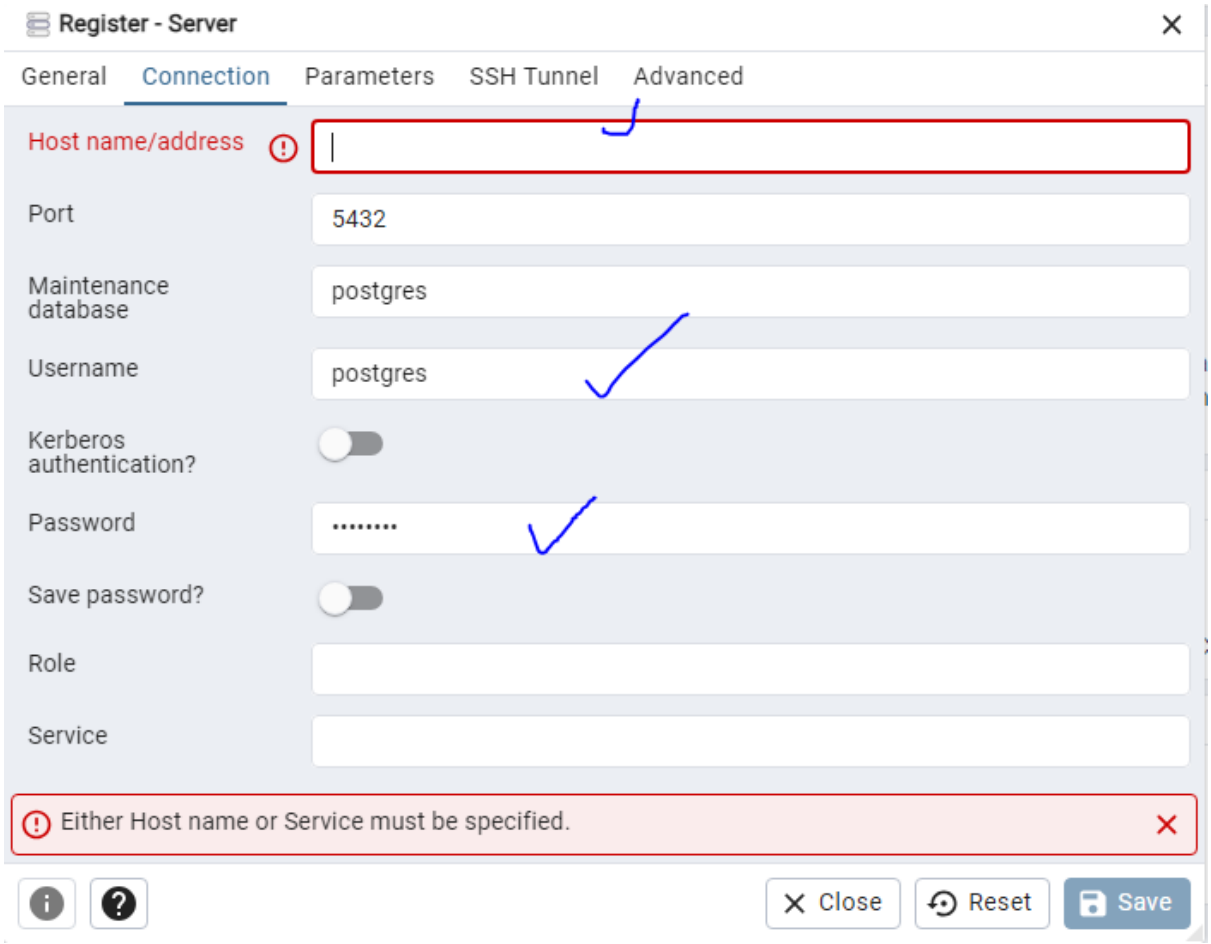


Enter name of the server



Click on connection tab and enter the host name given in rds

Enter username and password given in rds



Click on save

Connections is established