RELATIONAL DATABASE SERVICE (RDS)

Amazon Relational Database Service (Amazon RDS) is a web service that makes it easier to set up, operate, and scale a relational database in the cloud. It provides cost-efficient, resizable capacity for an industry-standard relational database and manages common database administration tasks.

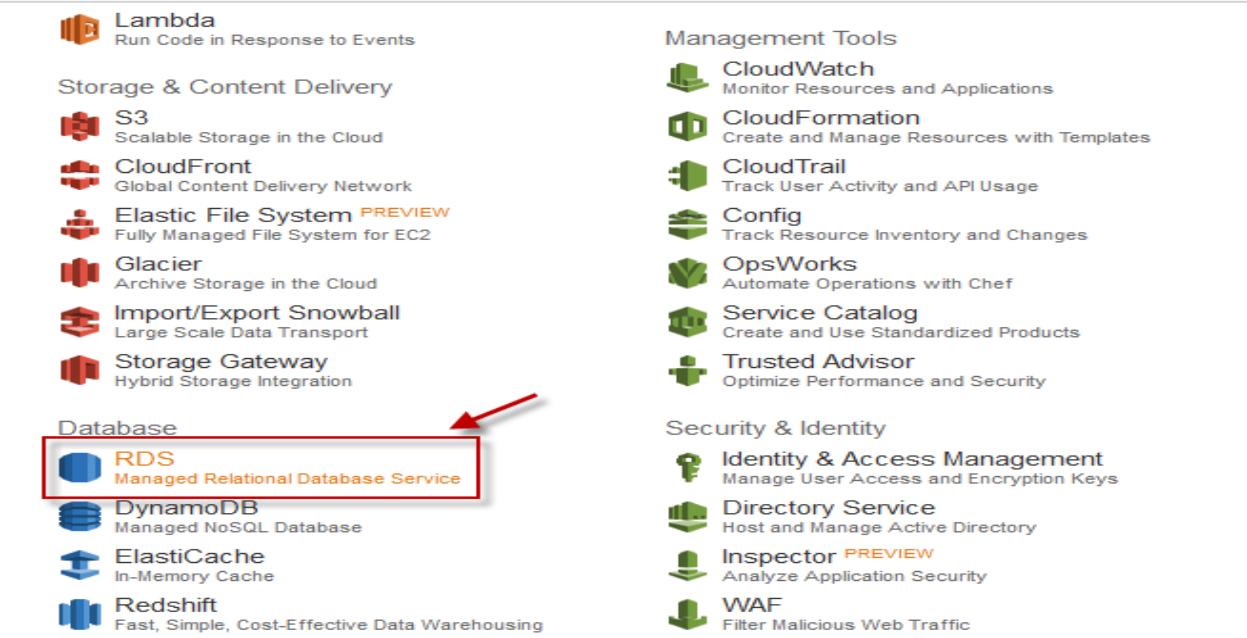
DB Instances: The basic building block of Amazon RDS is the DB instance. A DB instance is an isolated database environment in the cloud. A DB instance can contain multiple user-created databases, and you can access it by using the same tools and applications that you use with a stand-alone database instance.

Each DB instance runs a DB engine. Amazon RDS currently supports the MySQL, Maria DB, PostgreSQL, Oracle, and Microsoft SQL Server DB engines.

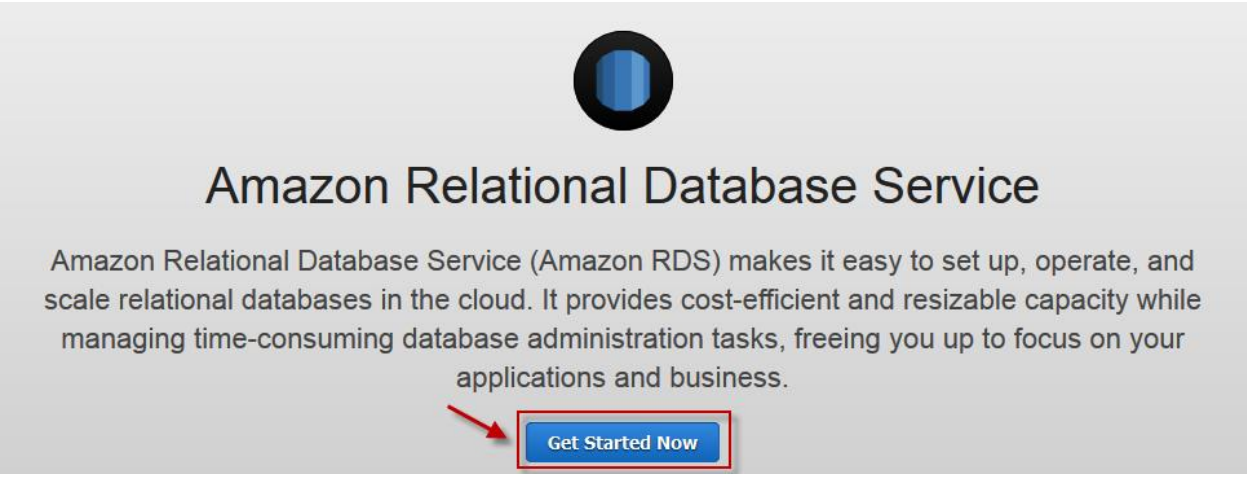
For each DB instance, you can select from 5 GB to 6 TB of associated storage capacity. Each DB instance class has minimum and maximum storage requirements for the DB instances that are created from it. It's important to have sufficient storage so that your databases have room to grow and that features for the DB engine have room to write content or log entries.

DB instance storage comes in three types: Magnetic, General Purpose (SSD), and Provisioned IOPS (SSD). They differ in performance characteristics and price, allowing you to tailor your storage performance and cost to the needs of your database.

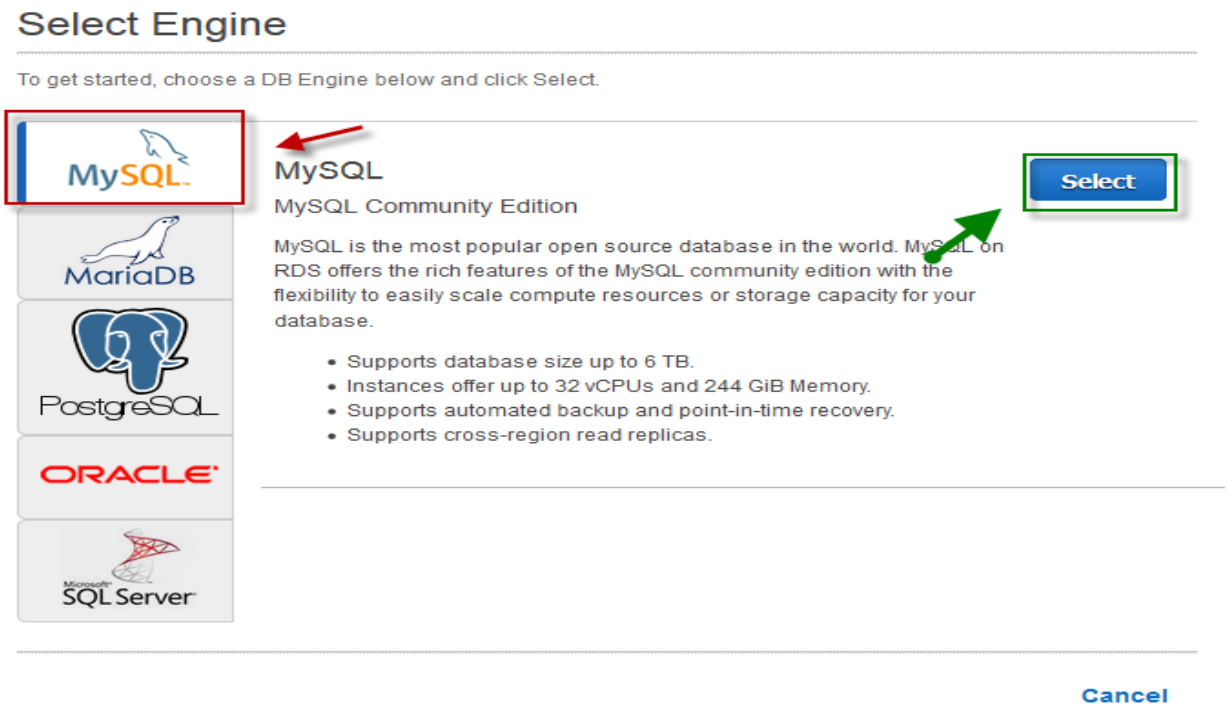
Once you logged in to AWS management console, go to the console page. Choose RDS from Database under AWS console page.



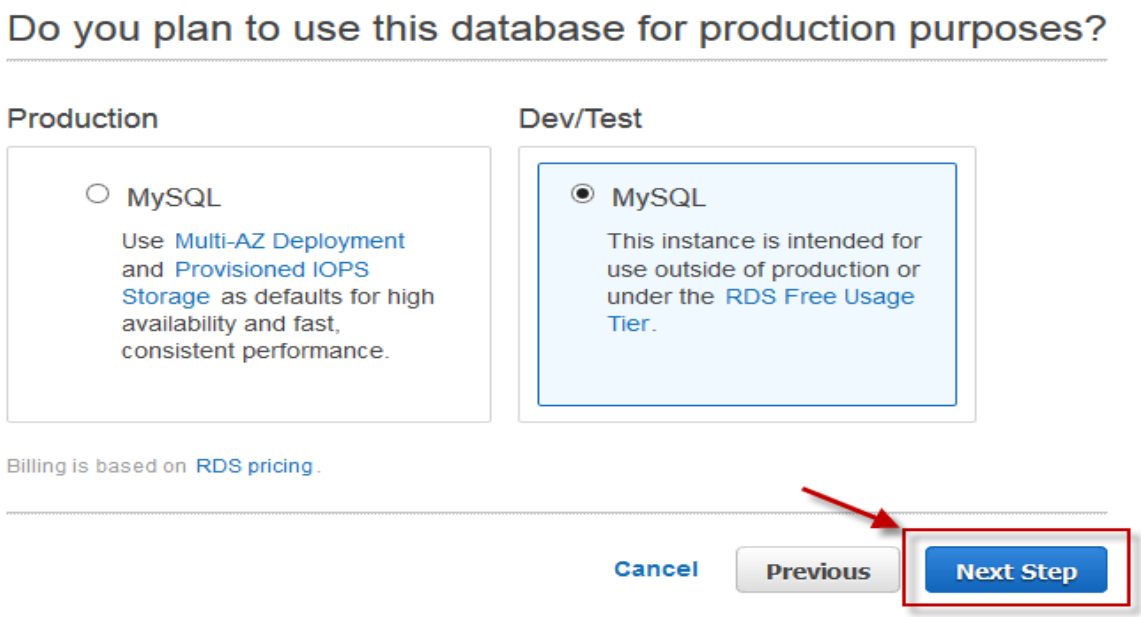
Choose Get started Now to start using RDS.



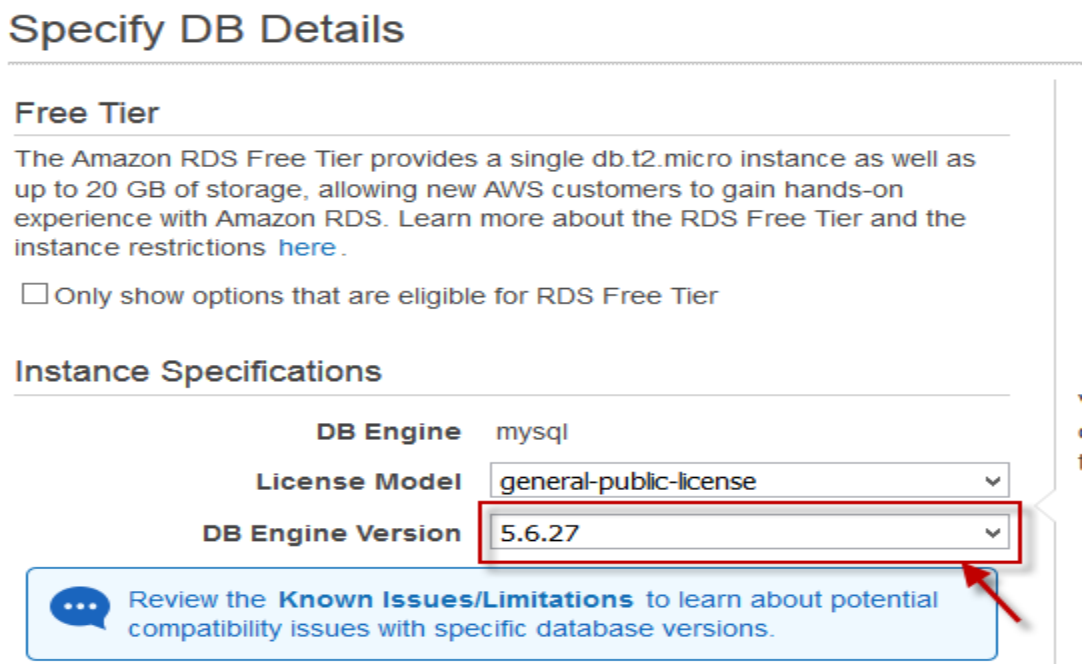
In the next page, choose the database engine and click on Select.



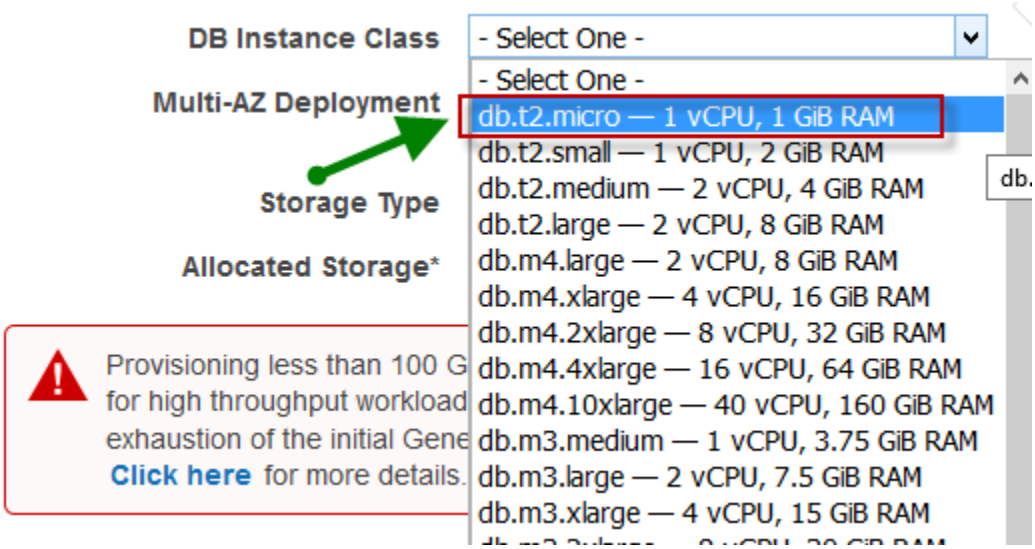
Choose either Production or Dev/Test and choose Next Step.
Make sure to select Dev/Test if we are launching it under Free tier.



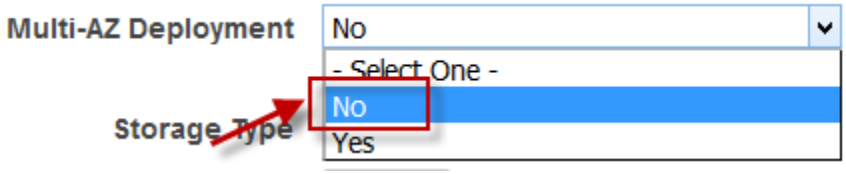
In the next page choose license model and select DB engine version.



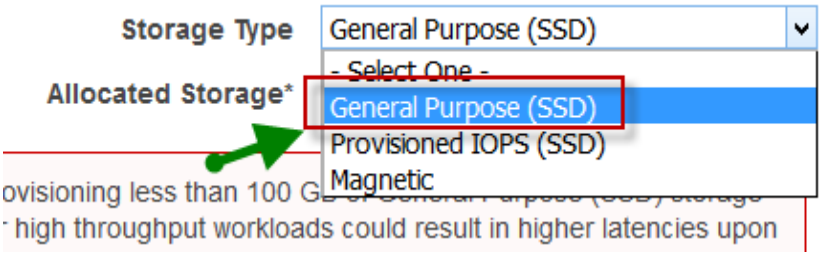
Next choose DB instance class from the drop down list, make sure to select db.t2.micro to use under Free Tier.



Next choose Multi-AZ Deployment either yes or No, make sure to select no to use under Free Tier.

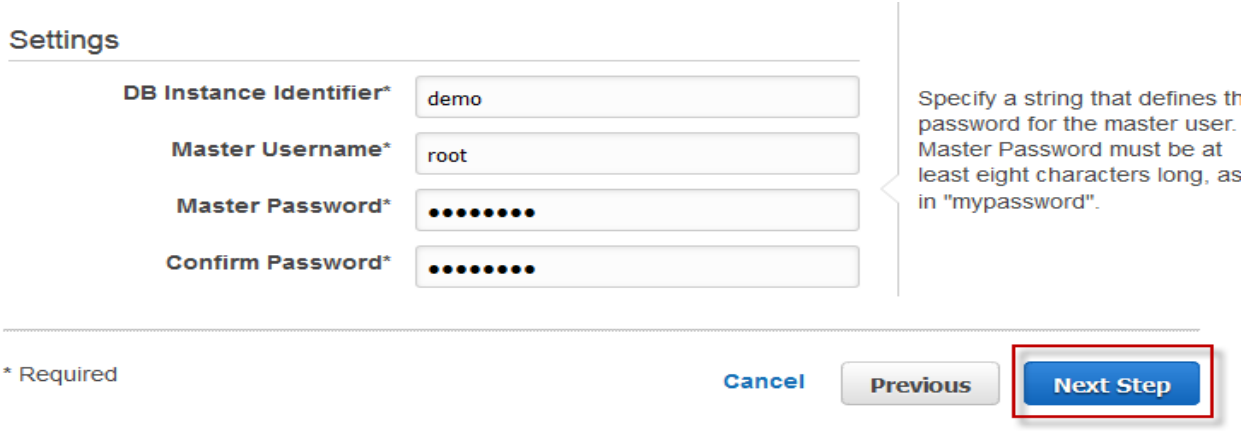


Next choose Storage Type from the drop down list.



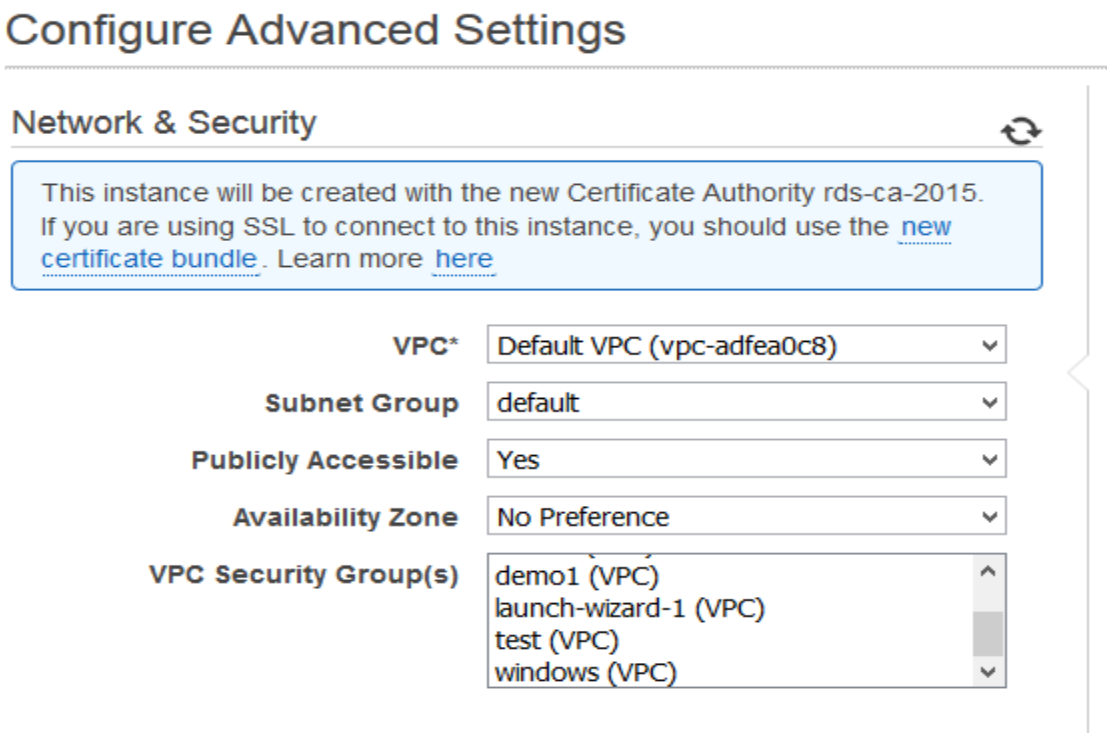
Next specify storage in the Allocated storage text field.

Under Settings, specify a name for DB instance, master username, master user password.
Then choose Next Step to continue.



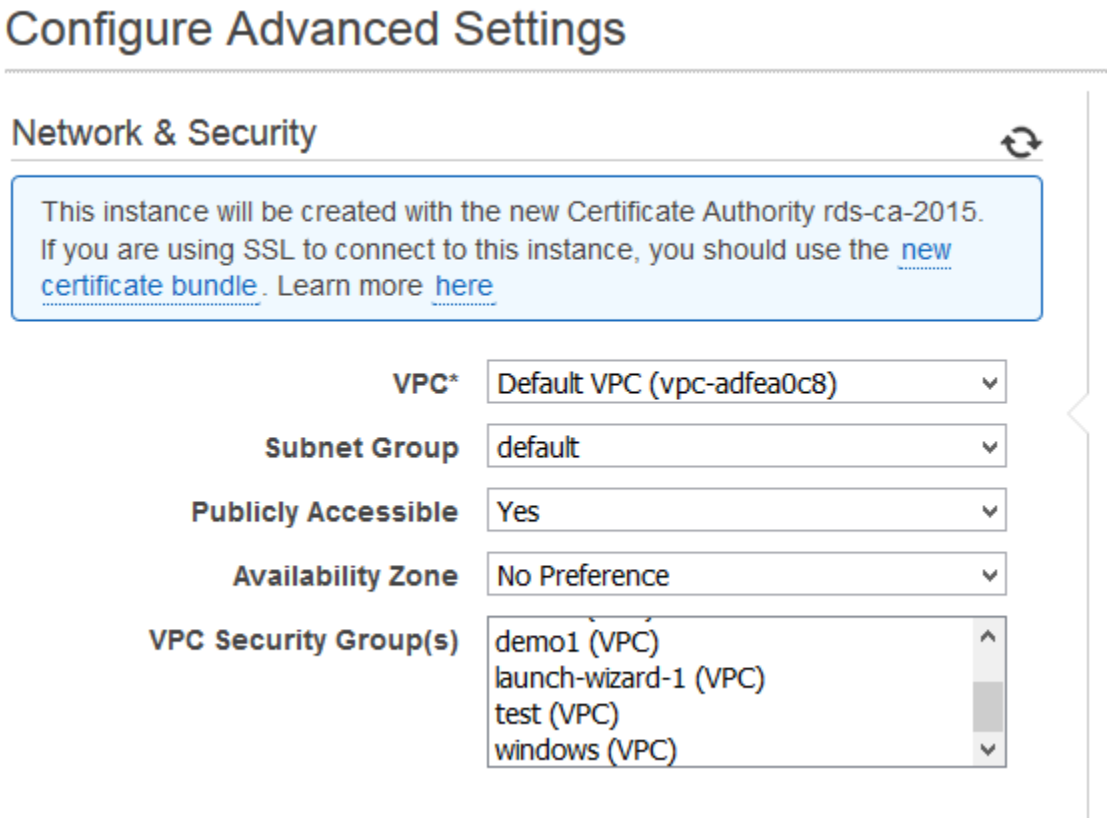
Under Network & Security choose VPC configurations.

- Select VPC from VPC drop down list.
- Select Default for Subnet Group.
- Choose either Yes or No for Public accessibility.
- Specify an Availability Zone from the drop down list.
- Choose VPC security groups from the list.



Under database options, specify a database name to be created with rds instance.

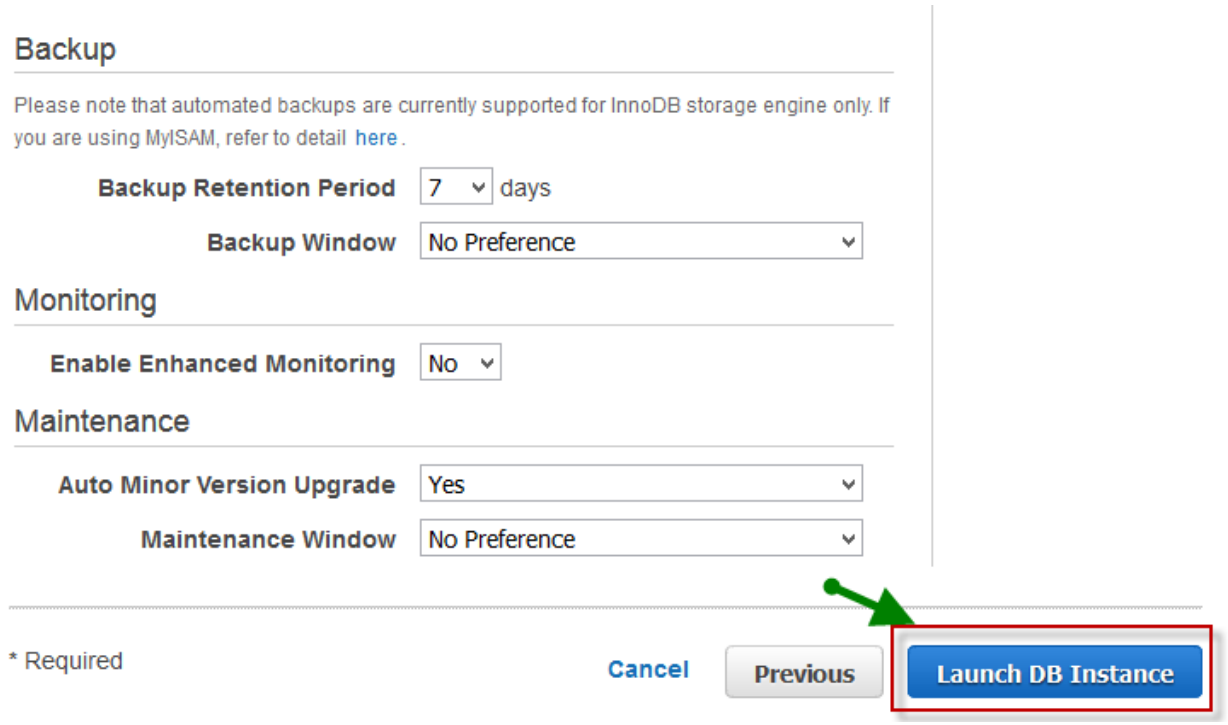
- Specify Database port to run RDS instance.
- Choose DB Parameter and Option groups.



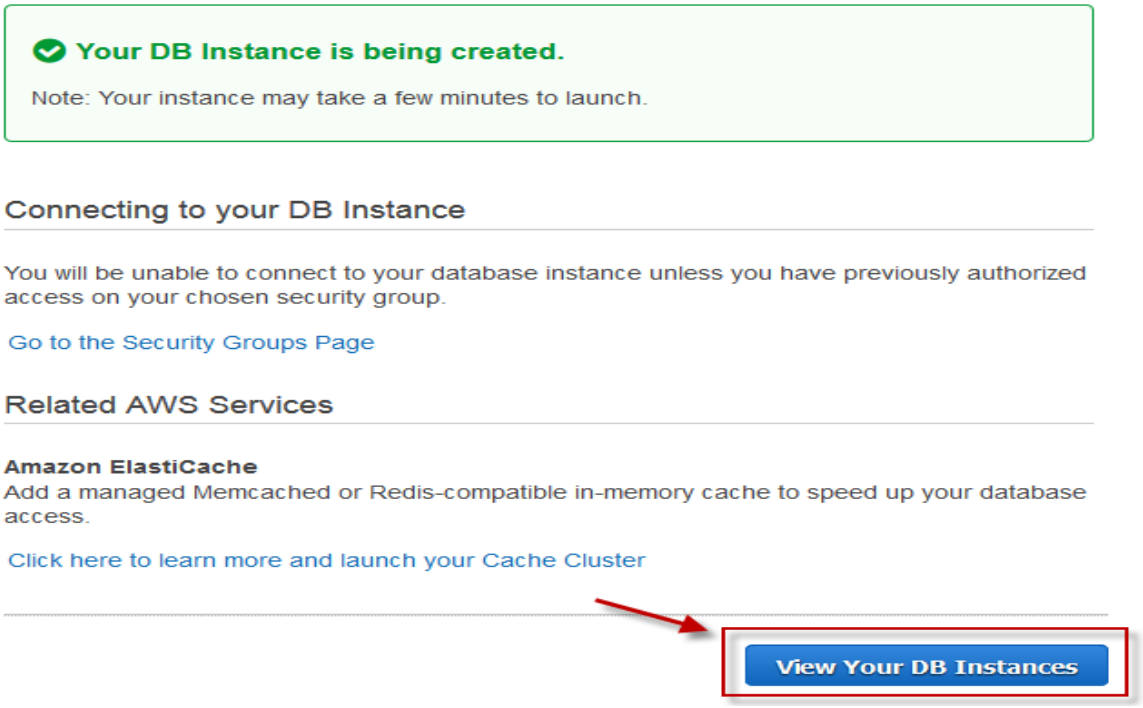
Under the Backup section, specify backup, monitoring, and maintenance details.

- Like how many days of backups you need for this RDS instance.
- When to backup.
- Enhanced monitoring.
- Upgrade and patches to be installed or not.
- When to install upgrades and patches.

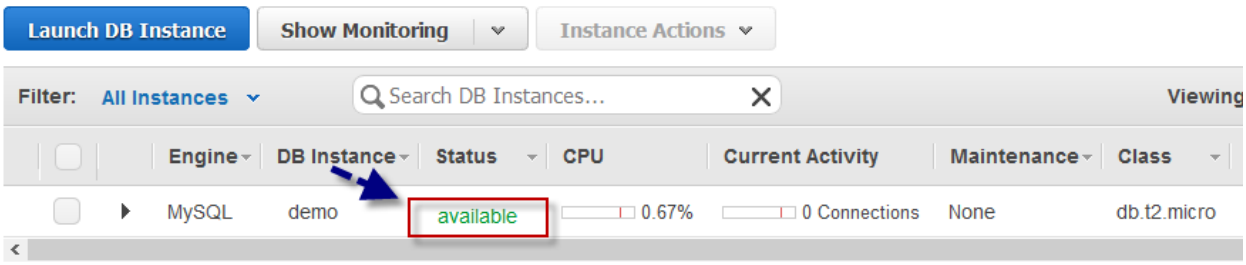
After specifying these details choose Launch DB instance to start creating.



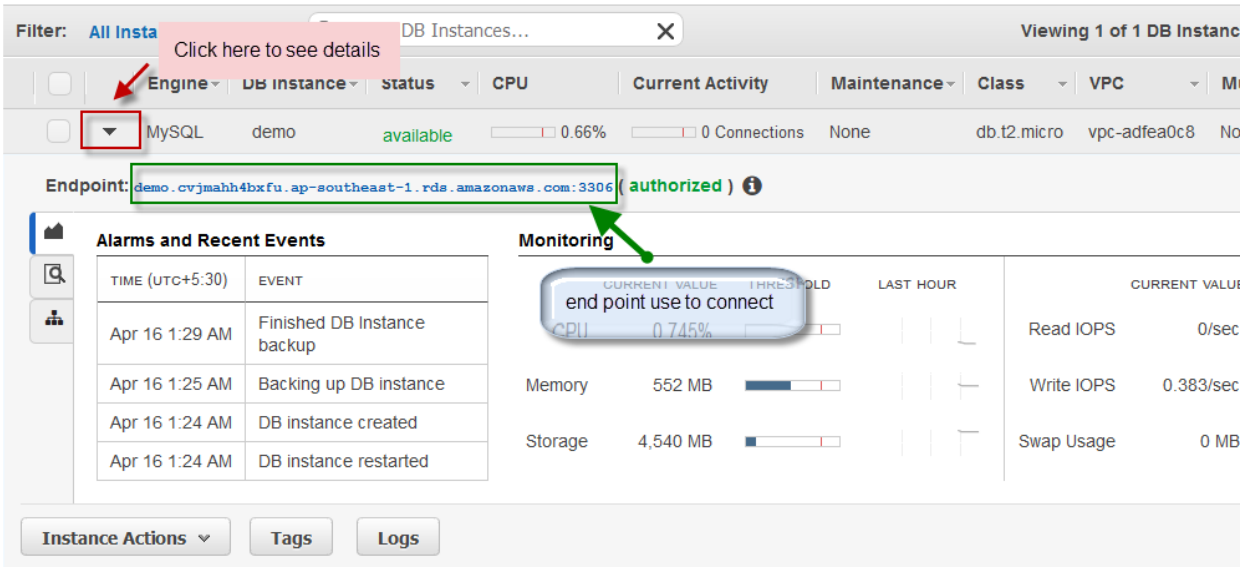
Click on View your DB Instances to see the instances.



Once RDS creation completed, the status will show as available.

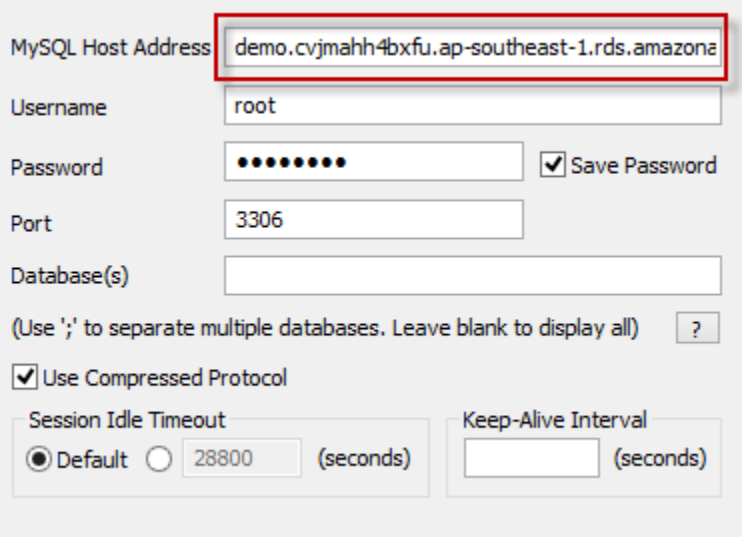


Then click on arrow symbol to expand to see details.
End Point is used to connect to RDS instance.

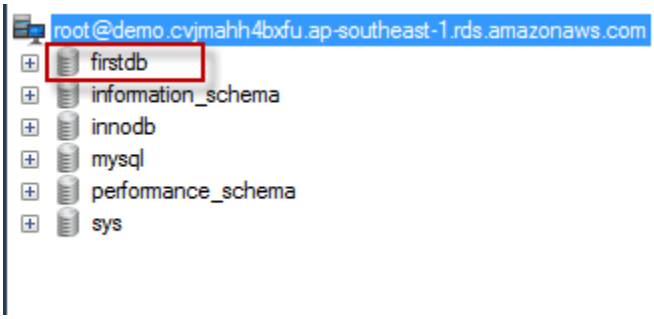


CONNECT TO RDS INSTANCE USING CLIENTS

Use MySQL clients to connect to RDS instances.
Specify End Point as Host or IP Address, Port 3006, and specify user and password combination to connect to RDS DB instance.



Once connected you can be able see the databases available on RDS.



Make sure to open DB instance port to connect in RDS security Group, otherwise you will not be able to connect.

TERMINATE RDS DB INSTANCE

Once you are in RDS page, click in Instances tab.
Then select instance, go to Instance Actions tab, choose Delete to RDS DB Instance.