

MySQL Workbench Installation & RDS Connection

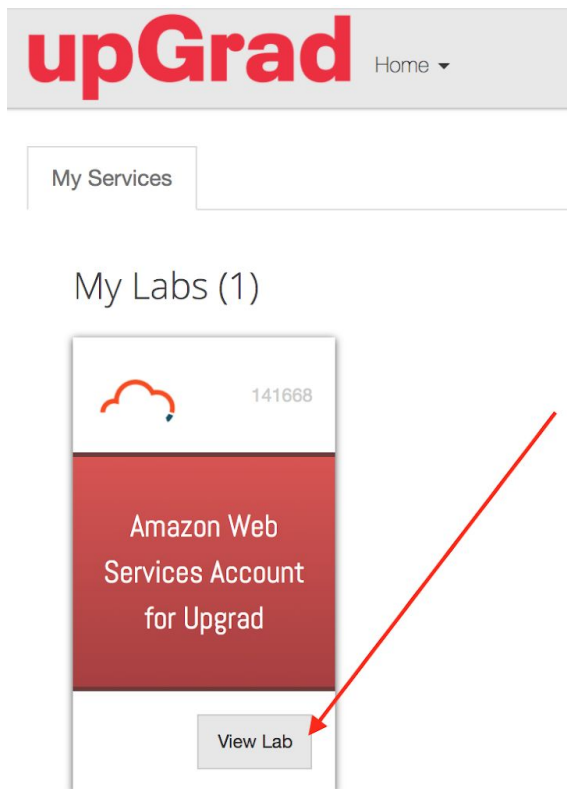
<https://dev.mysql.com/doc/workbench/en/wb-installing.html>

AWS RDS

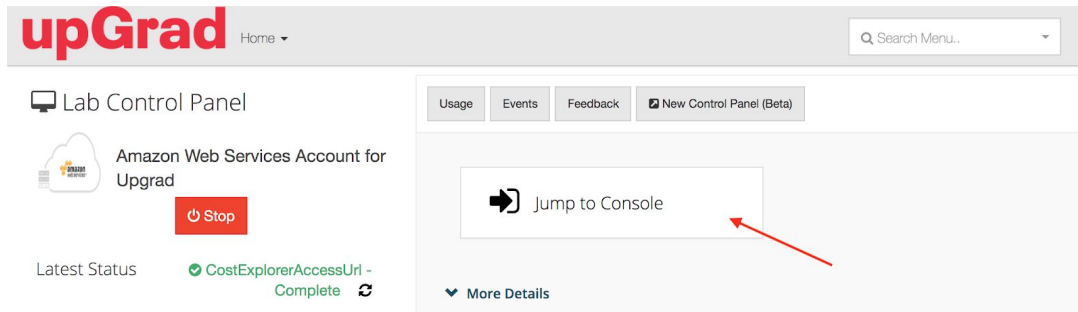
Important Note: AWS RDS is a costlier service, hence to avoid unnecessary deduction of your AWS budget please delete the RDS instance once you are done with your practice. Please don't keep your RDS instance running if you're not using it. AWS will charge you some money even if you have paused it. The steps to delete the instance are provided below.

RDS DB Instance Set up

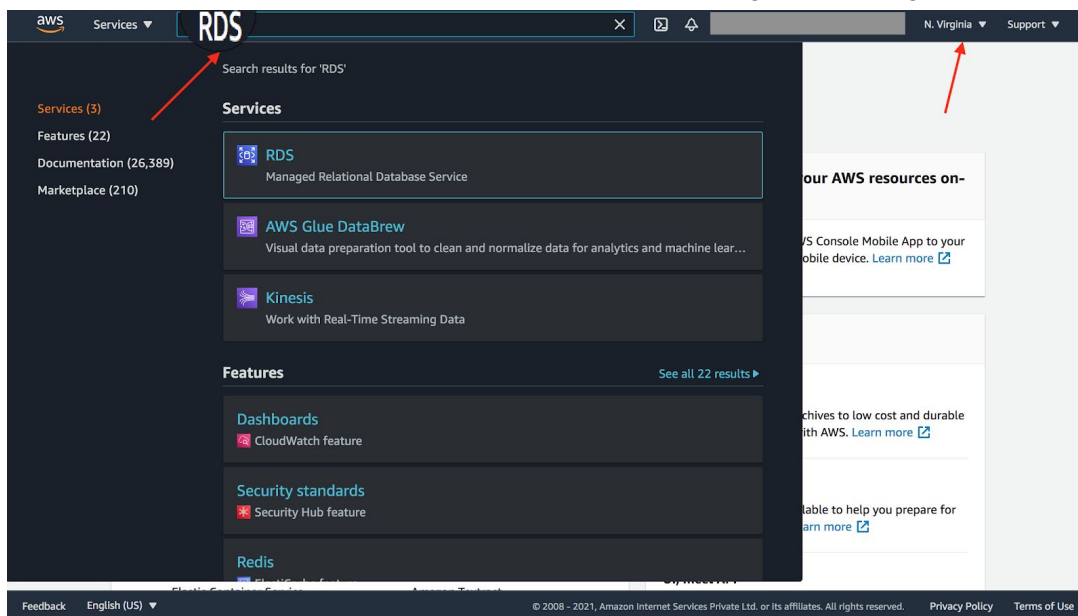
1. Login to your NevuPro account
2. View Lab



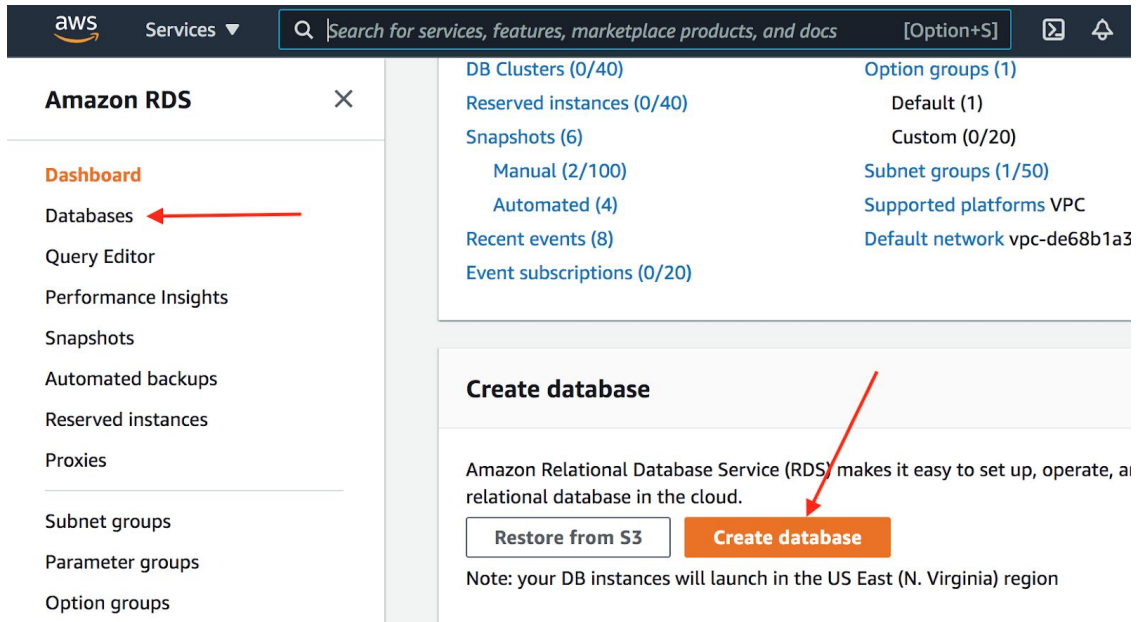
3. Jump to Console



4. Search for RDS in the AWS search bar (Make sure the region is N.Virginia)

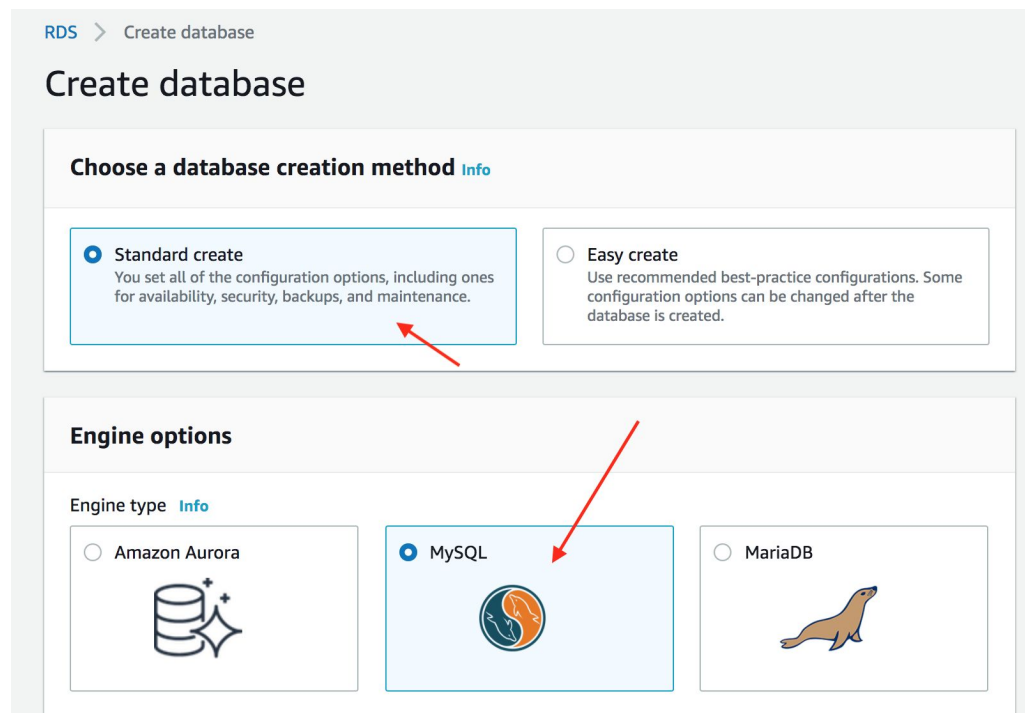


5. Click on 'Create Database' (which will create a DB Instance) in RDS



6. Follow the steps to create a DB Instance:

a. Select 'Standard Create' and 'MySQL'



b. Choose "Free Tier" and pick a database name

Templates

Choose a sample template to meet your use case.

☐ **Production**
 Use defaults for high availability and fast, consistent performance.

☐ **Dev/Test**
 This instance is intended for development use outside of a production environment.

☒ **Free tier**
 Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS. [Info](#)

Settings

DB instance identifier [Info](#)
 Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 60 alphanumeric characters or hyphens (1 to 15 for SQL Server). First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

- c. Set credentials (choose a password of your choice and **remember it**)

▼ Credentials Settings

Master username [Info](#)
 Type a login ID for the master user of your DB instance.

1 to 16 alphanumeric characters. First character must be a letter

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

Master password [Info](#)

Constraints: At least 8 printable ASCII characters. Can't contain any of the following: / (slash), ' (single quote), " (double quote) or @ (at sign).

Confirm password [Info](#)

- d. Skip all the configuration after it, move to Connectivity settings and give public access

Connectivity

Virtual private cloud (VPC) [Info](#)

VPC that defines the virtual networking environment for this DB instance.

Default VPC (vpc-de68b1a3)

Only VPCs with a corresponding DB subnet group are listed.

After a database is created, you can't change the VPC selection.

Subnet group [Info](#)

DB subnet group that defines which subnets and IP ranges the DB instance can use in the VPC you selected.

default-vpc-de68b1a3

Public access [Info](#)

Yes

Amazon EC2 instances and devices outside the VPC can connect to your database. Choose one or more VPC security groups that specify which EC2 instances and devices inside the VPC can connect to the database.

No

RDS will not assign a public IP address to the database. Only Amazon EC2 instances and devices inside the VPC can connect to your database.

VPC security group

Choose a VPC security group to allow access to your database. Ensure that the security group rules allow the appropriate incoming traffic.

Choose existing

Create new

e. Move to the end and create the database.

Additional configuration

Database options, backup enabled, backtrack disabled, Enhanced Monitoring disabled, maintenance, CloudWatch Logs, delete protection disabled

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 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](#).

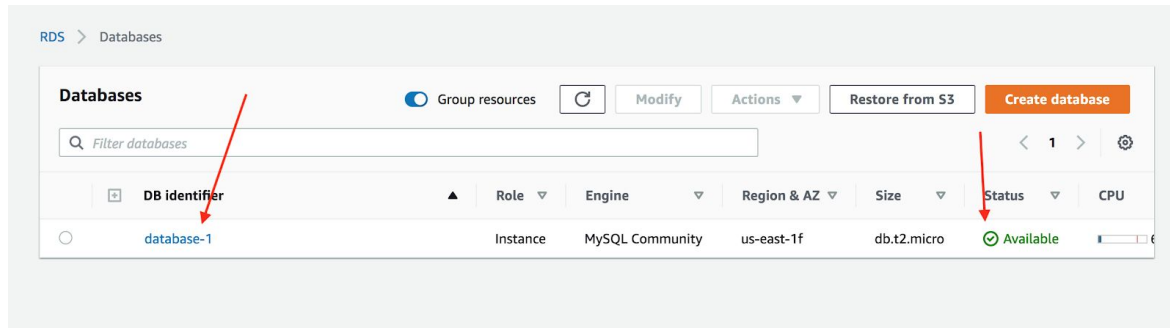
You are responsible for ensuring that you have all of the necessary rights for any third-party products or services that you use with AWS services.

Cancel

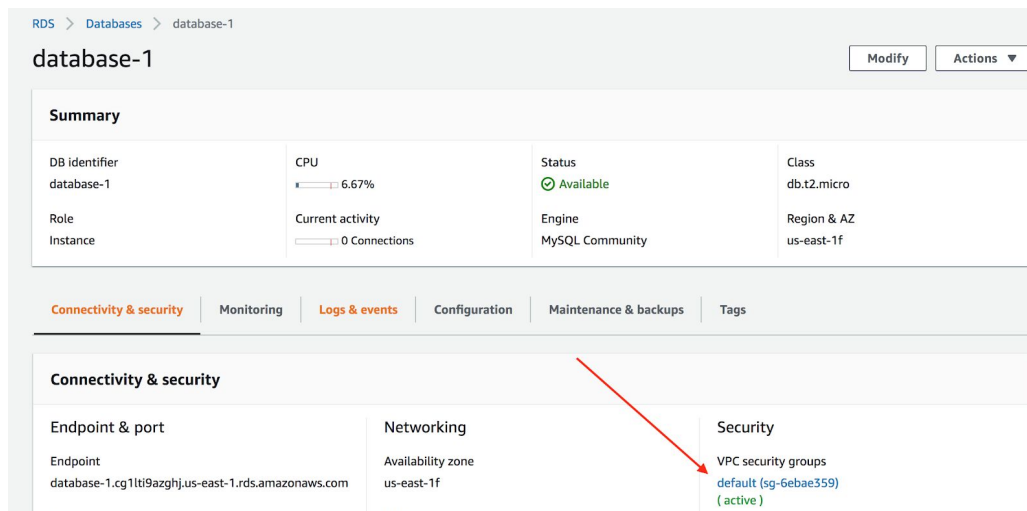
Create database

RDS DB Instance Security Configuration

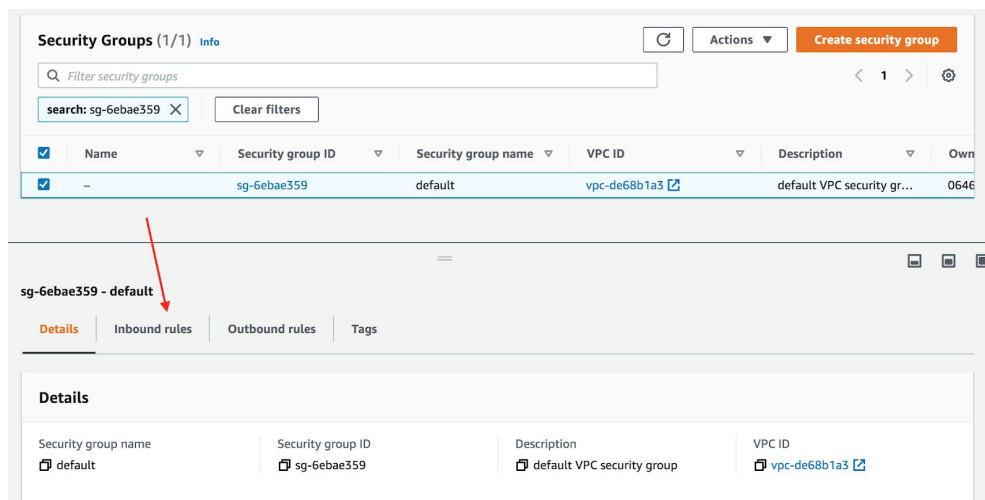
Once your database is created and available, you will be able to see it in the list of databases on RDS



After the database is created, set up security configuration. To do that, click on your database, and you will see, as shown in the image below.



Click on the default security link and select inbound rules



Add a new inbound rule to allow traffic from your computer. Set Custom TCP, port 3306, and MySQL and save

EDIT INBOUND RULES [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

Type	Protocol	Port range	Source	Description - optional	
All traffic	All	All	Custom		Delete
Custom TCP	TCP	3306	My IP		Delete

[Add rule](#)

NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.

[Cancel](#) [Preview changes](#) [Save rules](#)

This will allow connection to your DB instance on RDS from your system's IP Address.

The public IP address is dynamic hence subject to change as per your ISP. To avoid any confusion, we recommend you to set the MyIP every time you want to login to the RDS server.

RDS DB Instance Delete

To delete your instance, simply go to the list of databases, select delete action and on getting a prompt, type in 'delete me' and click delete.

RDS > Databases

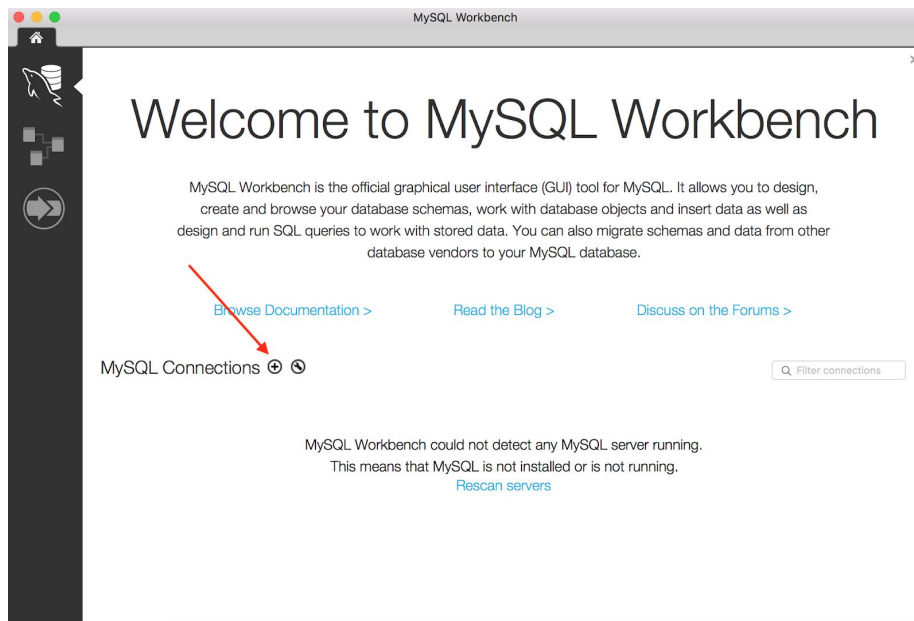
Databases [Group resources](#) [Modify](#) [Actions](#) [Restore from S3](#) [Create database](#)

DB identifier	Role	Engine	Status	CPU
database-1	Instance	MySQL Community	Available	2.micro

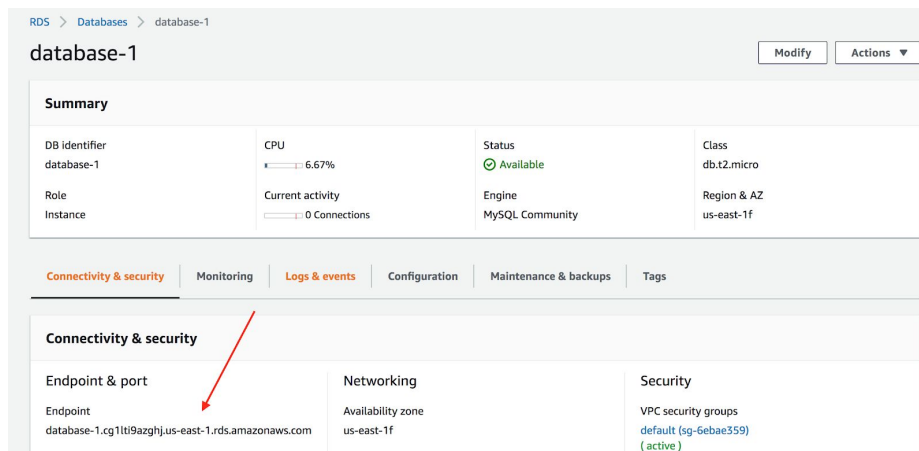
[Stop](#) [Reboot](#) [Delete](#) [Create read replica](#) [Promote](#) [Take snapshot](#) [Restore to point in time](#)

Connect RDS DB instance with MySQL Workbench

Open MySQL Workbench and create a new Connection.



Add RDS endpoint details which you can get from RDS DB instance details



Set connection name, hostname, the username (admin), password that you had set on RDS, and test connection. If the connection is successful, click ok.

The screenshot shows a 'Setup New Connection' dialog box with the following fields and controls:

- Connection Name:** A text field containing 'sample'. A red arrow points to this field.
- Connection Method:** A dropdown menu showing 'Standard (TCP/IP)'. A red arrow points to this field.
- Parameters tab:** The 'Parameters' tab is selected, showing fields for Hostname, Username, Password, and Default Schema.
- Hostname:** A text field containing 'sampleendpoint'. A red arrow points to this field.
- Port:** A text field containing '3306'.
- Username:** A text field containing 'admin'. A red arrow points to this field.
- Password:** A text field with buttons 'Store in Keychain ...' and 'Clear'. A red arrow points to this field.
- Default Schema:** An empty text field. A red arrow points to this field.
- Test Connection:** A button at the bottom right. A red arrow points to this button.
- OK:** A button at the bottom right. A red arrow points to this button.