

RDS configuration

Amazon Relational Database Service (Amazon RDS) is a collection of managed services that makes it simple to set up, operate, and scale databases in the cloud.

- Login to AWS console go through RDS
- Select Create Databases
- Choose database creation method as Standard create

Create database


Choose a database creation method [Info](#)


☒ **Standard create**
You set all of the configuration options, including ones for availability, security, backups, and maintenance.


☐ **Easy create**
Use recommended best-practice configurations. Some configuration options can be changed after the database is created.


- Now, Choose database type as required. AWS database will provide 6 types of databases. We will choose mariadb for now.
- We can also choose the version of our database.


Engine type
[Info](#)


☐ Aurora (MySQL Compatible)



☐ Aurora (PostgreSQL Compatible)



☐ MySQL


☒ MariaDB


☐ PostgreSQL


☐ 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 Amazon RDS Optimized Writes
[Info](#)

Amazon RDS Optimized Writes improves write throughput by up to 2x at no additional cost.

Engine Version

MariaDB 10.11.6

- Choose template. This is for demonstration purpose so we will choose Free tier

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](#)

- Name Db instance identifier as required. Create master username password as required and used for future use

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.

database-1

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

▼ **Credentials Settings**

Master username [Info](#)

Type a login ID for the master user of your DB instance.

admin

1 to 16 alphanumeric characters. The first character must be a letter.

Credentials management

You can use AWS Secrets Manager or manage your master user credentials.

☐ **Managed in AWS Secrets Manager - most secure**

RDS generates a password for you and manages it throughout its lifecycle using AWS Secrets Manager.

☒ **Self managed**

Create your own password or have RDS create a password that you manage.

☐ **Auto generate password**

Amazon RDS can generate a password for you, or you can specify your own password.

Master password [Info](#)

Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / ' * @

Confirm master password [Info](#)

- Choose general purpose SSD(gp2) as storage. Disable storage autoscaling.

Storage

Storage type [Info](#)

Provisioned IOPS SSD (io2) storage volumes are now available.

General Purpose SSD (gp2)
Baseline performance determined by volume size

Allocated storage [Info](#)

20
GIB

The minimum value is 20 GIB and the maximum value is 6,144 GIB

ⓘ After you modify the storage for a DB instance, the status of the DB instance will be in storage-optimization. Your instance will remain available as the storage-optimization operation completes. [Learn more](#)

▼ **Storage autoscaling**

Storage autoscaling [Info](#)

Provides dynamic scaling support for your database's storage based on your application's needs.

☐ **Enable storage autoscaling**

Enabling this feature will allow the storage to increase after the specified threshold is exceeded.

- This will setup the connectivity with EC2 and choose instance created before.

Connectivity [Info](#)

Compute resource

Choose whether to set up a connection to a compute resource for this database. Setting up a connection will automatically change connectivity settings so that the compute resource can connect to this database.

☐ **Don't connect to an EC2 compute resource**
Don't set up a connection to a compute resource for this database. You can manually set up a connection to a compute resource later.

☒ **Connect to an EC2 compute resource**
Set up a connection to an EC2 compute resource for this database.

EC2 instance [Info](#)

Choose the EC2 instance to add as the compute resource for this database. A VPC security group is added to this EC2 instance. A VPC security group is also added to the database with an inbound rule that allows the EC2 instance to access the database.

I-Oe60b83ef73288561
new-web-server

- Set VPC as default.
- Choose the security group created before in EC2 instance configuration.

VPC security group (firewall) [Info](#)

Choose one or more VPC security groups to allow access to your database. Make sure that the security group rules allow the appropriate incoming traffic.

☒ Choose existing

Choose existing VPC security groups

☐ Create new

Create new VPC security group

Additional VPC security group

Choose one or more options ▼

launch-wizard-4 ✕



Amazon RDS will add a new VPC security group `rds-ec2-2` to allow connectivity with your compute resource.

Availability Zone [Info](#)

us-east-1a ▼

Certificate authority - optional [Info](#)

Using a server certificate provides an extra layer of security by validating that the connection is being made to an Amazon database. It does so by checking the server certificate that is automatically installed on all databases that you provision.

rds-ca-rsa2048-g1 (default) ▼

Expiry: May 26, 2061

If you don't select a certificate authority, RDS chooses one for you.

- Set Initial database name.
- Disable automated backup.
- Disable encryption.

▼ Additional configuration

Database options, encryption turned off, backup turned off, 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](#)

Option group [Info](#)

Backup

☐ Enable automated backups

Creates a point-in-time snapshot of your database

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](#)

Log exports

Select the log types to publish to Amazon CloudWatch Logs

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

- Disable deletion protection.

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.

- At last, it will show monthly cost of RDS.

Estimated Monthly costs

DB Instance	12.41 USD
Storage	2.30 USD
Total	14.71 USD

This billing estimate is based on on-demand usage as described in [Amazon RDS Pricing](#). Estimate does not include costs for backup storage, I/Os (if applicable), or data transfer.

Estimate your monthly costs for the DB Instance using the [AWS Simple Monthly Calculator](#).

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](#).

- Select Create Database.
- Wait for some minute to create database

RDS > Databases > database-1

database-1

Refresh

Modify

Actions

Summary

DB Identifier database-1 CPU 23.26%	Status Available Class db.t3.micro	Role Instance Current activity 0 Connections	Engine MariaDB Region & AZ us-east-1a	Recommendations
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Connectivity & security

Monitoring

Logs & events

Configuration

Maintenance & backups

Tags

Recommendations

Connectivity & security

Endpoint & port Endpoint database-1.cju6weki8erd.us-east-1.rds.amazonaws.com Port 3306	Networking Availability Zone us-east-1a VPC vpc-0dbf4f945b3a97799 Subnet group rds-ec2-db-subnet-group-1 Subnets subnet-067cb63208033f8ed subnet-0b26ca7feaa60fe0c subnet-01f968284161d8a7a subnet-0f1c6b7d6e2f2b60a subnet-0fb652ca335ed16cb	Security VPC security groups rds-ec2-2 (sg-0eb27d2053ce09023) Active launch-wizard-4 (sg-0de00d3e34e9bb7b) Active Publicly accessible No Certificate authority Info rds-ca-rsa2048-g1 Certificate authority date May 26, 2061, 05:19 (UTC+05:45)
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