

RDS Home

Amazon RDS

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Amazon Aurora

Amazon Aurora is a MySQL- and PostgreSQL-compatible enterprise-class database, starting at <\$1/day. Aurora supports up to 64TB of auto-scaling storage capacity, 6-way replication across three availability zones, and 15 low-latency read replicas. [Learn more](#)

Create database

Or, Restore Aurora DB cluster from S3

Resources

You are using the following Amazon RDS resources in the US East (Ohio) region (used/quota)

DB Instances (0/40)

Allocated storage (0 TB/100 TB)

Click here to increase DB Instances limit

DB Clusters (0/40)

Reserved instances (0/40)

Snapshots (0)

Manual (0/100)

Automated (0)

Recent events (0)

Event subscriptions (0/20)

Parameter groups (0)

Default (0)

Custom (0/100)

Option groups (0)

Default (0)

Custom (0/20)

Subnet groups (0/50)

Supported platforms VPC

Default network vpc-077c7747a9076e6ae

Create database

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale a relational database in the cloud.

Restore from S3

Create database

Note: your DB instances will launch in the US East (Ohio) region

Recommended for you

Build RDS Operational Tasks

Watch how to enable users to perform common tasks such as snapshots or restart DB instances in Amazon RDS. [Learn more](#)

Test Your DR Strategy in Minutes

Amazon Aurora Global Database now supports planned managed failover, making disaster recovery drills a breeze. [Learn more](#)

Implementing Cross-Region DR

Learn how to set up Cross-Region disaster recovery (DR) for Aurora PostgreSQL using an Aurora global database spanning multiple Regions. [Learn more](#)

Migrate SSRS to RDS for SQL Server

Learn how you can migrate existing SSRS content to an Amazon RDS for SQL Server instance using a PowerShell module. [Learn more](#)

Additional information

Getting started with RDS

Overview and features

Now we create a subnet group for our RDS,

Subnet Group Home:

RDS > Subnet groups

Subnet groups (0)

Filter by subnet group

No db subnet groups

You don't have any db subnet groups.

Create DB subnet group

Create subnet with the below details as 'Team-D-SubnetGroup'

Subnet group details

Name
You won't be able to modify the name after your subnet group has been created.

Must contain from 1 to 255 characters. Alphanumeric characters, spaces, hyphens, underscores, and periods are allowed.

Description

VPC
Choose a VPC identifier that corresponds to the subnets you want to use for your DB subnet group. You won't be able to choose a different VPC identifier after your subnet group has been created.

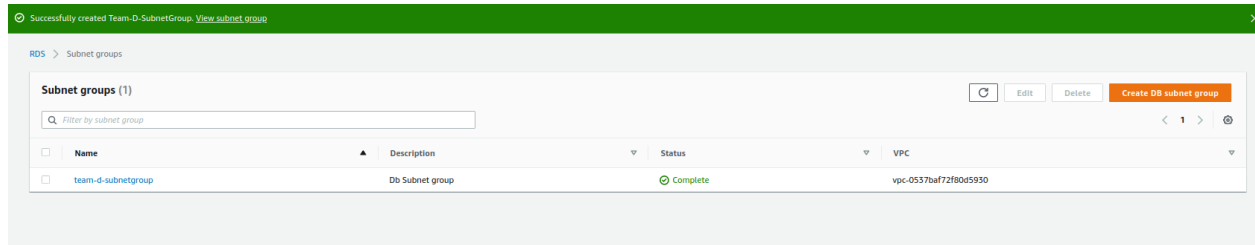
Add subnets

Availability Zones
Choose the Availability Zones that include the subnets you want to add.

Subnets
Choose the subnets that you want to add. The list includes the subnets in the selected Availability Zones.

Subnets selected (3)		
Availability zone	Subnet ID	CIDR block
us-east-2a	subnet-017289753c7257388	10.15.32.96/27
us-east-2c	subnet-076ab4bede73a39a9	10.15.32.160/27
us-east-2b	subnet-00c0b5c3137dbca7a	10.15.32.128/27

Add the private subnets from all the availability zones as above.



Create security group as 'Team-D-RDS-SG' adding the inbound rule for PostgreSQL for our private vpc as;

Create security group [Info](#)

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

Basic details

Security group name [Info](#)
Team-D-RDS-SG
Name cannot be edited after creation.

Description [Info](#)
Security grp for RDS

VPC [Info](#)
vpc-0537baef72f80d5930

Inbound rules

Type Info	Protocol Info	Port range Info	Source Info	Description - optional Info
PostgreSQL	TCP	5432	Custom 10.15.32.0/22	postgres allow to vpc

[Add rule](#)

Outbound rules

Type Info	Protocol Info	Port range Info	Destination Info	Description - optional Info
All traffic	All	All	Custom 0.0.0.0/0	

Create a database now:

RDS > Create database

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.

Engine options

Engine type [Info](#)

☐ Amazon Aurora



☐ MySQL



☐ MariaDB



☒ **PostgreSQL**



☐ Oracle

ORACLE

☐ Microsoft SQL Server



Version

PostgreSQL 13.3-R1



Templates

Choose a sample template to meet your use case.

are intended for high concurrency and read-intensive performance.

The instance is intended for development and testing of a production environment.

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.

Team-D-DB

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.

postgres

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) and @ (at sign).

Confirm password [Info](#)

DB instance class

DB Instance class [Info](#)

- ☐ Standard classes (includes m classes)
- ☐ Memory optimized classes (includes r and x classes)
- ☒ Burstable classes (includes t classes)

☐ Include previous generation classes

Storage

Storage type [Info](#)

General Purpose SSD (gp2)

Baseline performance determined by volume size

Allocated storage

20

GiB

(Minimum: 20 GiB. Maximum: 16,384 GiB) Higher allocated storage **may improve** IOPS performance.

i Provisioning less than 100 GiB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Learn more](#) [↗](#)

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 once the specified threshold is exceeded.

Availability & durability

Multi-AZ deployment [Info](#)

- ☒ **Do not create a standby instance**
- ☐ **Create a standby instance (recommended for production usage)**
Creates a standby in a different Availability Zone (AZ) to provide data redundancy, eliminate I/O freezes, and minimize latency spikes during system backups.

Connectivity



Connectivity



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

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

Team-D-VPC (vpc-0537baf72f80d5930) ▼

Only VPCs with a corresponding DB subnet group are listed.

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

Subnet group [Info](#)

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

team-d-subnetgroup ▼

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

Choose existing VPC security groups

☐ Create new

Create new VPC security group

Existing VPC security groups

Choose VPC security groups ▼

Team-D-RDS-SG ✕

Availability Zone [Info](#)

No preference ▼

Database authentication

Database authentication options [Info](#)

- ☒ **Password authentication**
Authenticates using database passwords.
- ☐ **Password and IAM database authentication**
Authenticates using the database password and user credentials through AWS IAM users and roles.
- ☐ **Password and Kerberos authentication**
Choose a directory in which you want to allow authorized users to authenticate with this DB instance using Kerberos Authentication.

► Additional configuration


Database options, encryption enabled, backup enabled, backtrack disabled, Performance Insights enabled, Enhanced Monitoring enabled, maintenance, CloudWatch Logs, delete protection disabled.

Estimated monthly costs

DB instance	13.14 USD
Storage	2.30 USD
Total	15.44 USD

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

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

 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

Database created with the endpoint and port 5432 :

The screenshot displays the Amazon RDS console interface. On the left is a navigation sidebar with options like Dashboard, Databases, Query Editor, Performance insights, Snapshots, Automated backups, Reserved instances, Proxies, Subnet groups, Parameter groups, Option groups, Custom engine versions, Events, Event subscriptions, Recommendations, and Certificate update. The main panel shows the configuration for the 'team-d-db' instance. At the top, there are tabs for Summary, Connectivity & security, Monitoring, Logs & events, Configuration, Maintenance & backups, and Tags. The 'Summary' tab is active, showing a table with instance details: DB identifier (team-d-db), CPU (-), Status (Available), Class (db.t3.micro), Role, Current activity, Engine (PostgreSQL), and Region & AZ (us-east-2a). Below this, the 'Connectivity & security' tab is selected, showing three columns: Endpoint & port, Networking, and Security. The Endpoint & port column lists the endpoint (team-d-db.cnqk9ixkil5f.us-east-2.rds.amazonaws.com) and port (5432). The Networking column lists the availability zone (us-east-2a), VPC (Team-D-VPC), subnet group (team-d-subnetgroup), and subnets. The Security column lists VPC security groups (Team-D-RDS-SG), public accessibility (No), certificate authority (rds-ca-2019), and certificate authority date (August 22, 2024).

Summary			
DB identifier	CPU	Status	Class
team-d-db	-	Available	db.t3.micro
Role	Current activity	Engine	Region & AZ
Instance		PostgreSQL	us-east-2a

Connectivity & security		
Endpoint & port	Networking	Security
Endpoint	Availability Zone	VPC security groups
team-d-db.cnqk9ixkil5f.us-east-2.rds.amazonaws.com	us-east-2a	Team-D-RDS-SG (sg-07cf5647d34e37d85)
Port	VPC	Active
5432	Team-D-VPC (vpc-0537baf72fb0d5950)	Publicly accessible
	Subnet group	No
	team-d-subnetgroup	Certificate authority
	Subnets	rds-ca-2019
	subnet-00c0b5c3137dbca7a	Certificate authority date
	subnet-076ab4bede73a39a9	August 22, 2024, 10:53 (UTC+10:53)
	subnet-017289753c7257388	

Let us now login to our postgres as:

```
[ec2-user@ip-10-15-32-111 ~]$ sudo su postgres
bash-4.2$ psql -h team-d-db.cnqk9ixkil5f.us-east-2.rds.amazonaws.com -U postgres -d postgres -W
could not change directory to "/home/ec2-user": Permission denied
Password:
bash-4.2$ psql -h team-d-db.cnqk9ixkil5f.us-east-2.rds.amazonaws.com -U postgres -d postgres -W
could not change directory to "/home/ec2-user": Permission denied
Password:
psql (12.9, server 13.3)
WARNING: psql major version 12, server major version 13.
         Some psql features might not work.
SSL connection (protocol: TLSv1.2, cipher: ECDHE-RSA-AES256-GCM-SHA384, bits: 256, compression: off)
Type "help" for help.

postgres=>
```