SQL Server

- **Create SQL Server instance on RDS using AWS Console.**
  - o RDS > Create Database

Create database

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

Create database

You can use a backup from Amazon S3 to restore and create a new Aurora MySQL and MySQL database.

Restore from S3

Note: your DB instances will launch in the **Asia Pacific (Singapore)** region

  - o Select engine > Microsoft SQL server

Choose a database creation method

○ **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

○ Aurora (MySQL Compatible)

○ Aurora (PostgreSQL Compatible)

○ MySQL

○ PostgreSQL

○ MariaDB

○ Oracle

ORACLE

● Microsoft SQL Server

Microsoft
SQL Server

○ IBM Db2

IBM **Db2**

o Select database management type

Database management type **Info**

◉ Amazon RDS
RDS fully manages your database, including automatic patching. Choose this option if you don't
need to customize your environment.

○ Amazon RDS Custom
RDS manages your database and gives you privileged access to the OS. Use this option if you want
to customize the database, OS, and infrastructure.

Edition

◉ SQL Server Express Edition
Affordable database management system that supports database sizes up to 10 GB.

○ SQL Server Web Edition
In accordance with Microsoft's licensing policies, it can only be used to support public and Internet-
accessible webpages, websites, web applications, and web services.

○ SQL Server Standard Edition
Core data management and business intelligence capabilities for mission-critical applications and
mixed workloads.

○ SQL Server Enterprise Edition
Comprehensive high-end capabilities for mission-critical applications with demanding database
workloads and business intelligence requirements.

License

License Included

Engine version

SQL Server 2019 15.00.4395.2.v1 ▼

o Select template

Templates
Choose a sample template to meet your use case.

○ 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**

o Setting

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.

satthyadatabase-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

••••••••••

Password strength [Strong]

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

Confirm master password | Info

••••••••••

o Instance configuration

Instance configuration
The DB instance configuration options below are limited to those supported by the engine that you selected above.

DB instance class | Info
▼ Hide filters

◯ Include previous generation classes

● Burstable classes (includes t classes)

db.t3.micro
2 vCPUs   1 GiB RAM   Network: Up to 2,085 Mbps

o   Storage

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

Allocated storage value must be 20 GiB to 16,384 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**

o   Connectivity

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

Virtual private cloud (VPC) Info
Choose the VPC. The VPC defines the virtual networking environment for this DB instance.

Default VPC (vpc-014ccf5a14583eefe)
3 Subnets, 3 Availability Zones   ▼

Only VPCs with a corresponding DB subnet group are listed.

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

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

default   ▼

Public access Info

⦿ Yes
   RDS assigns a public IP address to the database. Amazon EC2 instances and other resources outside of the VPC can connect to your
   database. Resources inside the VPC can also connect to the database. Choose one or more VPC security groups that specify which
   resources can connect to the database.

○ No
   RDS doesn't assign a public IP address to the database. Only Amazon EC2 instances and other resources inside the VPC can connect to
   your database. Choose one or more VPC security groups that specify which resources can connect to the database.

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**	○ **Create new**
Choose existing VPC security groups	Create new VPC security group

Existing VPC security groups

Choose one or more options	▼

[default ✕]

Availability Zone Info

No preference	▼

RDS Proxy

RDS Proxy is a fully managed, highly available database proxy that improves application scalability, resiliency, and security.

☐ Create an RDS Proxy Info

RDS automatically creates an IAM role and a Secrets Manager secret for the proxy. RDS Proxy has additional costs. For more information, see Amazon RDS Proxy pricing 🔗.

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 22, 2061 | |

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

▼ **Additional configuration**

Database port Info

TCP/IP port that the database will use for application connections.

1433

o Create database

▶ **Additional configuration**

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

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.
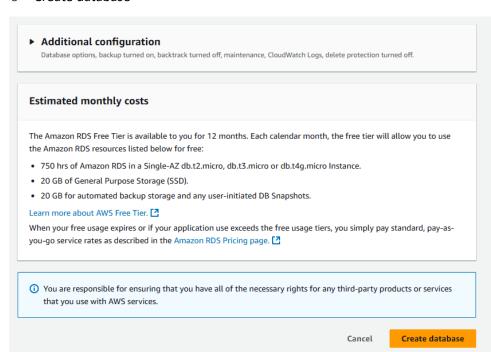
Cancel   **Create database**
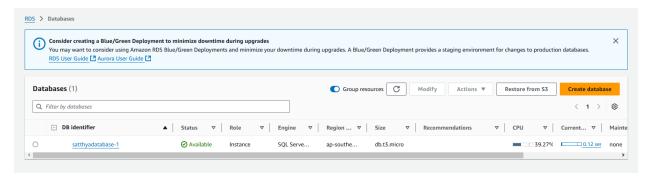
o   Final Output

- **Connect to database using Microsoft SQL Server management studio**