

@devopschallengehub



How do you provision and configure a basic RDS instance?

✓ Short Answer for Interview

To provision RDS, I go to the console, choose the DB engine, instance class, storage, set credentials, configure networking/security groups, and launch. Then I connect using the DB endpoint. For production, I'd also enable backups, encryption, and Multi-AZ.

🎯 Example

Let's say I need a MySQL DB for a small app:

- I'd pick **MySQL**, free-tier db.t3.micro, 20 GB gp3 storage, enable backups for 7 days.
- Open **port 3306** for my app security group.
- Once created, my app can use the **endpoint** in its config to connect.

✓ Step-by-Step Answer

Go to RDS Console

- Sign in → AWS Management Console → RDS service.
2. **Click "Create Database"**
 - Choose **Standard Create** (more control).
 - Pick your **DB engine** (e.g., MySQL, PostgreSQL).
3. **Choose DB Instance Class**
 - For test/demo → db.t3.micro (free tier eligible).
 - For production → something like db.m5.large.
4. **Set Credentials**
 - Enter **master username & password**.
 - Store securely (don't hardcode in apps).
5. **Configure Storage**
 - Select storage type (gp3 by default).
 - Allocate GB (e.g., 20 GB for demo).
 - Enable **storage autoscaling** (optional).
6. **Set Connectivity**
 - Choose **VPC** and **subnets**.

- Set **publicly accessible** = **YES** if you want to connect from laptop (not recommended for prod).
 - Pick/create a **security group** → allow inbound **3306 (MySQL)** or appropriate DB port.
7. **Additional Config (optional)**
- DB name (initial schema).
 - Enable backups (e.g., 7 days retention).
 - Enable encryption if required.
 - Multi-AZ deployment for HA (recommended for prod).
8. **Launch DB**
- Click **Create Database**.
 - Wait a few minutes (status: "Creating").
9. **Connect**
- Copy **endpoint** (like mydb.xxxxx.rds.amazonaws.com).
 - Use DB client or app to connect → `mysql -h endpoint -u admin -p`.
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What is the **first step** to create a new RDS instance in AWS?

- A. Launch an EC2 instance
- B. Go to RDS Console → Click "Create Database"
- C. Create an S3 bucket
- D. Configure CloudWatch alarms

✅ **Correct Answer: B**

💡 **Explanation:** You start from the **AWS RDS Console**, then click "**Create Database**" to begin provisioning.

Which of the following is a valid **DB engine option** you can select during RDS creation?

- A. MongoDB
- B. Cassandra
- C. MySQL
- D. DynamoDB

✅ **Correct Answer: C. MySQL**

💡 **Explanation:** RDS supports **MySQL, PostgreSQL, MariaDB, Oracle, SQL Server, and Aurora**, but not NoSQL engines like MongoDB or DynamoDB.

When setting up connectivity, which port should you open for a **MySQL RDS instance**?

- A. 1521
- B. 5432
- C. 1433
- D. 3306

✅ **Correct Answer: D. 3306**

💡 **Explanation:** MySQL uses **port 3306**; PostgreSQL uses 5432, Oracle uses 1521, SQL Server uses 1433.

Which feature should you enable to ensure **automatic failover** in case the primary RDS instance fails?

- A. Read Replicas
- B. Multi-AZ Deployment
- C. Enhanced Monitoring
- D. Storage Autoscaling

✅ **Correct Answer: B. Multi-AZ Deployment**

💡 **Explanation:** **Multi-AZ** maintains a **standby replica** in another Availability Zone for **automatic failover**.
