





EC2-RDS Connection Lab

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Introduction

1 In this lab, you will learn how to set up an Amazon RDS database and connect to it from an EC2 instance.

2 This hands-on exercise will guide you through the process of

1 Launching both an RDS instance and an EC2 instance

2 Configuring the necessary security settings

3 Establishing a connection to the database from your EC2 instance using the MySQL client

1 Step 1 Create Security Group for EC2

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|---|--------------------------|------------------------------------|
| 1 | Name | EC2-SG |
| 2 | Inbound Rules | SSH (Port 22) |
| 3 | Outbound Rules (default) | All Traffic (Port 0-65535) allowed |

2 Step 2 Create Security Group for RDS

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|---|--------------------------|----------------------------|
| 1 | Name | RDS-SG |
| 2 | Inbound Rules | MySQL/Aurora (Port 3306) |
| 3 | Outbound Rules (default) | All Traffic (Port 0-65535) |

3 Step-3 Create RDS Instance

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|---|-----------------------|--|
| 1 | Engine | MySQL |
| 2 | Instance Class | db.t2.micro (free tier eligible if applicable) |
| 3 | Configure Credentials | |

4 Step-4 Launch the EC2 Instance

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|---|------------------|-------------------|
| 1 | Type | t2.micro |
| 2 | OS | Amazon Linux 2023 |
| 3 | Public IP Assign | Yes |

5 Step-5 Connect EC2 to RDS

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|---|-------------------------------|--|
| 1 | Access EC2 Instance using SSH | |
| 2 | Install Mysql client | <div>1 sudo dnf update -y</div> <div>2 sudo dnf install mariadb105</div> |
| 3 | Access DB | mysql -h endpoint -P 3306 -u admin -p |

6 Step-6 Database Management

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|---|-----------------------------------|---|
| 1 | Create a Database | CREATE DATABASE SampleDB; |
| 2 | Select the Database | USE SampleDB; |
| 3 | Create a Sample Table | <div>CREATE TABLE employees (
id INT NOT NULL AUTO_INCREMENT,
name VARCHAR(100) NOT NULL,
position VARCHAR(100),
PRIMARY KEY (id)
);</div> |
| 4 | Insert Sample Data into the Table | <div>INSERT INTO employees (name, position) VALUES ('John Doe', 'Software Engineer');</div> <div>INSERT INTO employees (name, position) VALUES ('Jane Smith', 'Project Manager');</div> |
| 5 | Verify Insertion | SELECT * FROM employees; |