**DB Migrations Mysql to Mysql**

#### **Step 1: Configure the Source Database Instance (mySourceDatabase)**

1. **Navigate to**: AWS RDS service.
2. **Create Database**: Select the **Standard** database creation method.
3. **Engine**: Choose **MySQL**.
4. **Templates**: Choose **Free Tier**.
5. **DB Instance Identifier**: Enter mySourceDatabase.
6. **Credentials**:
   * **Username**: admin
   * **Password**: admin12345
7. **DB Instance Class**: Select **Burstable classes - db.t3.micro**.
8. **Storage Autoscaling**: Disable.
9. **Public Access**: Enable.
10. **Additional Configuration**:
    * **Database Options**: Initial database name set to myDatabase.
    * **Backup**: Leave unselected.
    * **Encryption**: Leave unselected.

#### **Step 2: Configure the Target Database Instance (myTargetDatabase)**

1. **Navigate to**: AWS RDS service.
2. **Create Database**: Select **Standard**.
3. **Engine**: Choose **MySQL**.
4. **Templates**: Choose **Free Tier**.
5. **DB Instance Identifier**: Enter myTargetDatabase.
6. **Credentials**:
   * **Username**: admin
   * **Password**: admin12345
7. **DB Instance Class**: Select **db.t3.micro**.
8. **Storage Autoscaling**: Disable.
9. **Public Access**: Enable.
10. **Database Port**: Set to **3306**.
11. **Database Options**: Leave initial database name field blank.
12. **Backup**: Leave unselected.
13. **Encryption**: Leave unselected.

#### **Step 3: Set Up AWS DMS (Database Migration Service)**

1. **Create Replication Instance**:
   * **Name**: myReplica
   * **Resource Name**: DemoARN
   * **Instance Class**: dms.t3.micro
   * **High Availability**: Select **Dev or Test**.
   * **Storage**: Set to **20 GB**.

#### **Step 4: Connect to the Source Database**

1. **Get the Endpoint**: Retrieve the endpoint of the mySourceDatabase instance from RDS.

**Connect via CLI**:  
bash  
Copy code  
mysql -h mysourcedatabase.c5kay8g0u99c.us-east-1.rds.amazonaws.com -u admin -p admin12345

1. **Adjust Security Settings** if connection issues arise:
   * Go to **Connection and Security** for the database instance.
   * Edit **VPC Security Groups**, add an inbound rule for **All Traffic** with **Source: Anywhere (IPv4)**.

**Create and Insert Data**:  
sql  
Copy code  
USE myDatabase;

CREATE TABLE tablename (...);

INSERT INTO tablename (...) VALUES (...);

#### **Step 5: Set Up Endpoints in DMS for Source and Target Databases**

1. **Source Endpoint**:
   * **Endpoint Identifier**: mySource
   * **Resource Name**: DemoSourceARN
   * **Engine**: MySQL
   * **Access Info**:
     + **Server Name**: Use mySourceDatabase endpoint.
     + **Port**: Set to **3306**.
     + **Username**: admin
     + **Password**: admin12345
2. **Target Endpoint**:
   * **Endpoint Identifier**: myTarget
   * **Resource Name**: DemoTargetARN
   * **Engine**: MySQL
   * **Access Info**:
     + **Server Name**: Use myTargetDatabase endpoint.
     + **Port**: **3306**
     + **Username**: admin
     + **Password**: admin12345

#### **Step 6: Create and Configure Database Migration Task**

1. **Task Identifier**: myMigrationTask
2. **Resource Name**: DemoMigrationsARN
3. **Replication Instance**: Select myReplica.
4. **Source Database Endpoint**: mySource
5. **Target Database Endpoint**: myTarget
6. **Migration Type**: Select **Migrate Existing Data**.
7. **Selection Rules**: Add new selection rule:
   * **Schema**: Specify the schema to migrate.
8. **Pre-migration Assessment**: Choose **No**.
9. **Create Task**.

This configuration completes the setup for migrating a MySQL database from one RDS instance to another using AWS DMS.