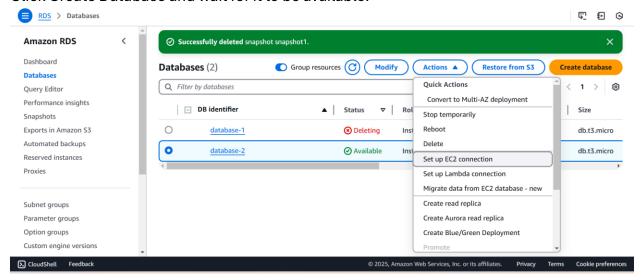
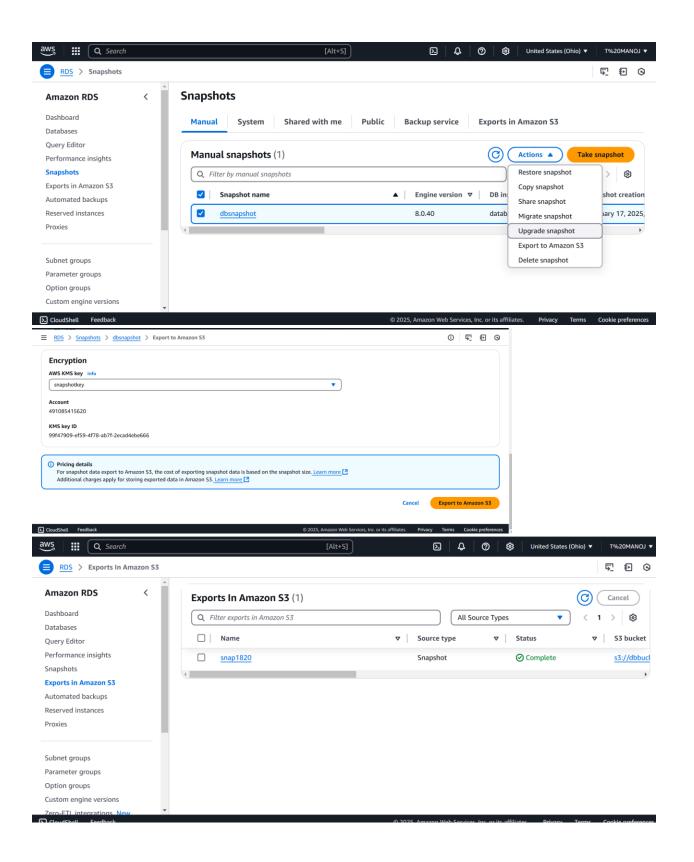
#### 1. Create a Database in Amazon RDS

- Log into the AWS Management Console and navigate to RDS.
- Click Create Database and select the required database engine (e.g., MySQL, PostgreSQL).
- Configure instance settings such as instance type, storage, and security group.
- Set up database credentials (username and password).
- Click Create Database and wait for it to be available.

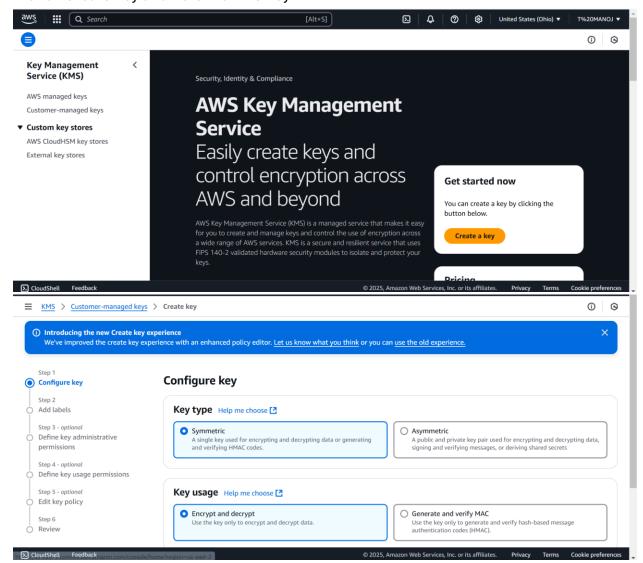


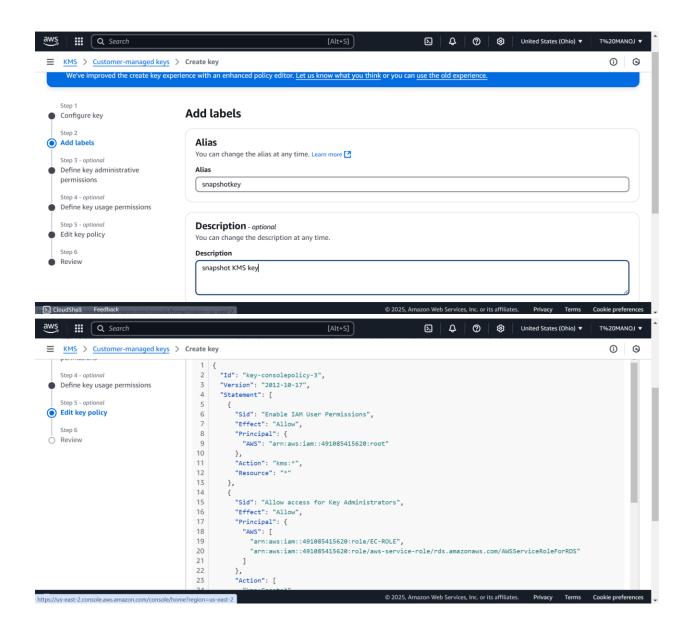
### 2. Create a Snapshot of the Database

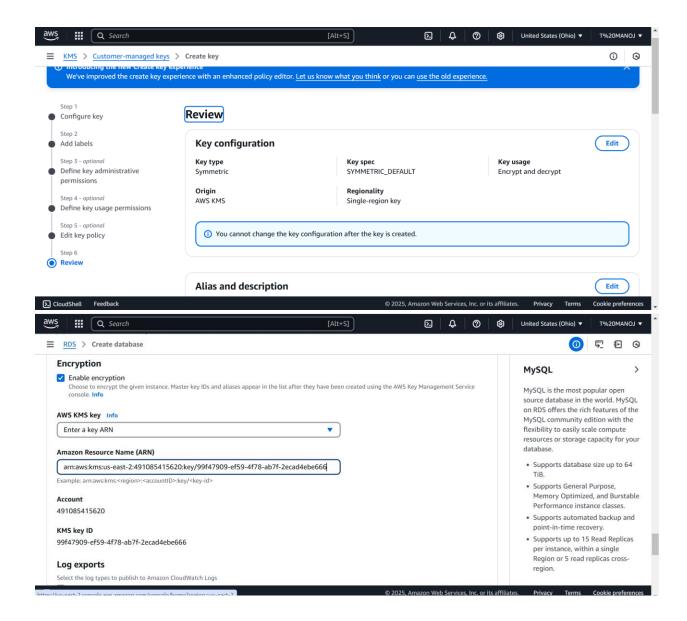
- .. In the RDS console, select the created database instance.
- .. Click Actions > Take Snapshot.
- .. Enter a unique name for the snapshot and confirm creation.
- .. Wait for the snapshot status to change to Available.



- 3. Create KMS Key for Encryption
- .. Navigate to IAM & KMS in the AWS console.
- .. Click Create Key and select Symmetric Key.
- .. Enter an alias and description for the key.
- .. Set permissions and attach an IAM policy to allow RDS access.
- .. Click Create Key and note the KMS Key ARN.







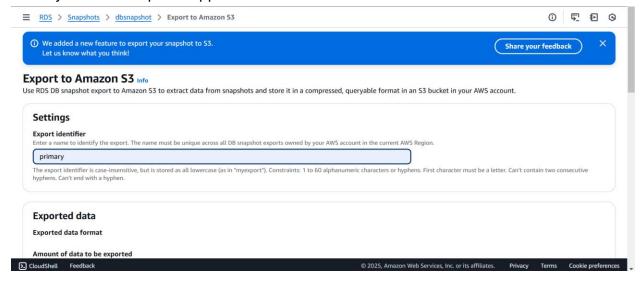
#### 4. Create IAM Role for RDS Access

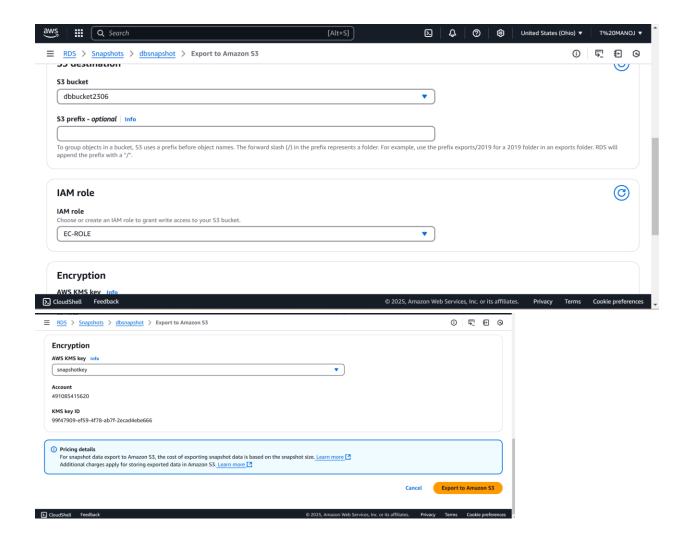
- .. Navigate to IAM > Roles and click Create Role.
- .. Choose AWS Service > RDS and click Next.
- ... Attach permissions for S3 Read Access and KMS Decrypt.
- .. Review and create the role.
- .. Assign the IAM role to the RDS instance.

### 5. Export the Snapshot to Amazon S3

.. Select the created snapshot in the RDS console.

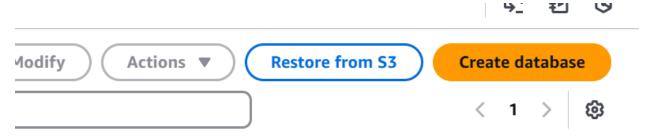
- .. Click Actions > Export to Amazon S3.
- .. Choose the destination S3 bucket for the exported snapshot.
- .. Select or create a KMS key for encryption.
- .. Start the export and wait for completion.
- .. Verify that the snapshot appears in the S3 bucket.





# 6. Delete the Original Database

- .. In the RDS Console, select the original database instance.
- .. Click Actions > Delete.
- .. Confirm deletion and ensure retention of snapshots in S3.



## 7. Restore the Database from the Snapshot in S3

- .. Navigate to RDS > Snapshots.
- .. Click Restore Snapshot and select the snapshot stored in S3.
- .. Configure the new database instance settings.
- .. Click Restore Database and wait for it to become available.

