Module 7

DynamoDB Assignment

Problem Statement:

You work for XYZ Corporation. Their application requires a database service that can store data which can be retrieved if required. Implement a suitable service for the same. While migrating, you are asked to perform the following tasks:

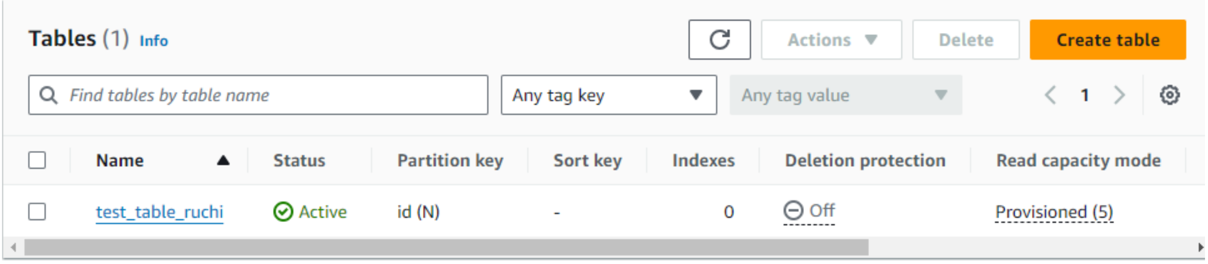
1. Create a DynamoDB table with partition key as ID.

2. Add 5 items to the DynamoDB table.

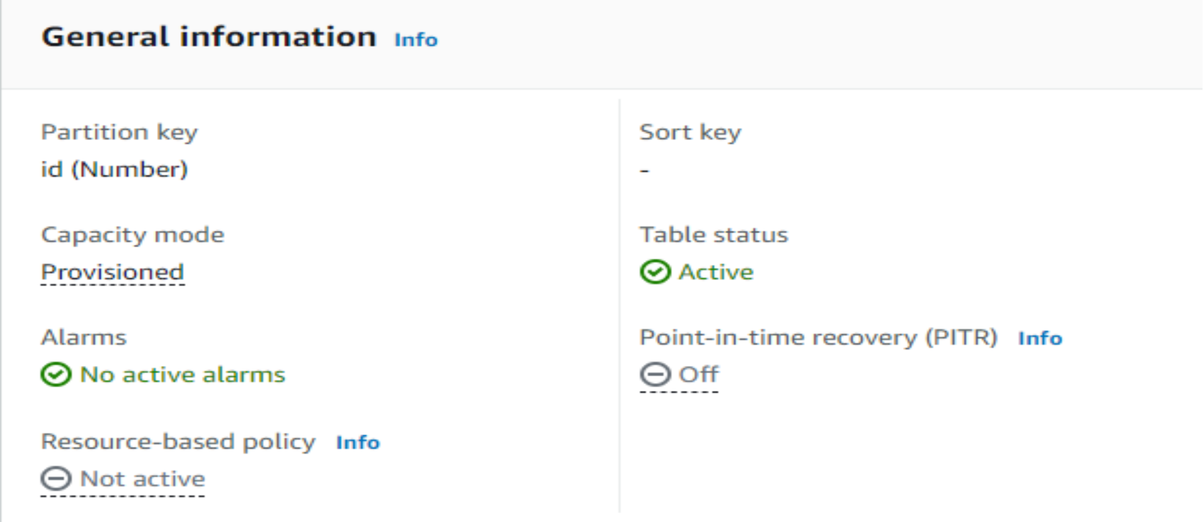
3. Take backup and delete the table

Solution:

First create the table



☐	Name ▲	Status	Partition key	Sort key	Indexes	Deletion protection	Read capacity mode
☐	test_table_ruchi	✓ Active	id (N)	-	0	⊖ Off	Provisioned (5)



General information Info

Partition key
id (Number)

Sort key
-

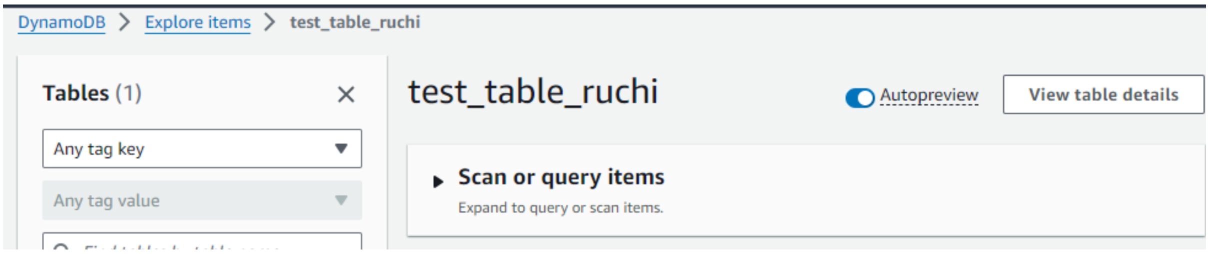
Capacity mode
Provisioned

Table status
✓ Active

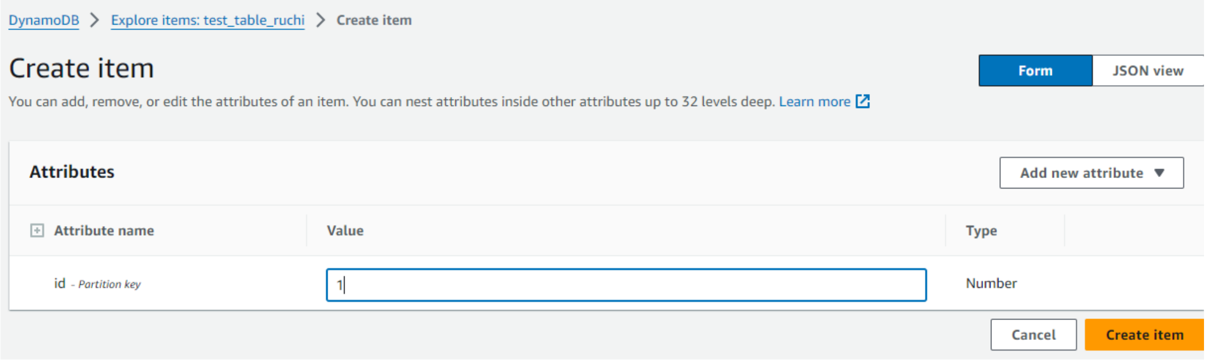
Alarms
✓ No active alarms

Point-in-time recovery (PITR) Info
⊖ Off

Resource-based policy Info
⊖ Not active



Then Create the item, give the attribute name and value



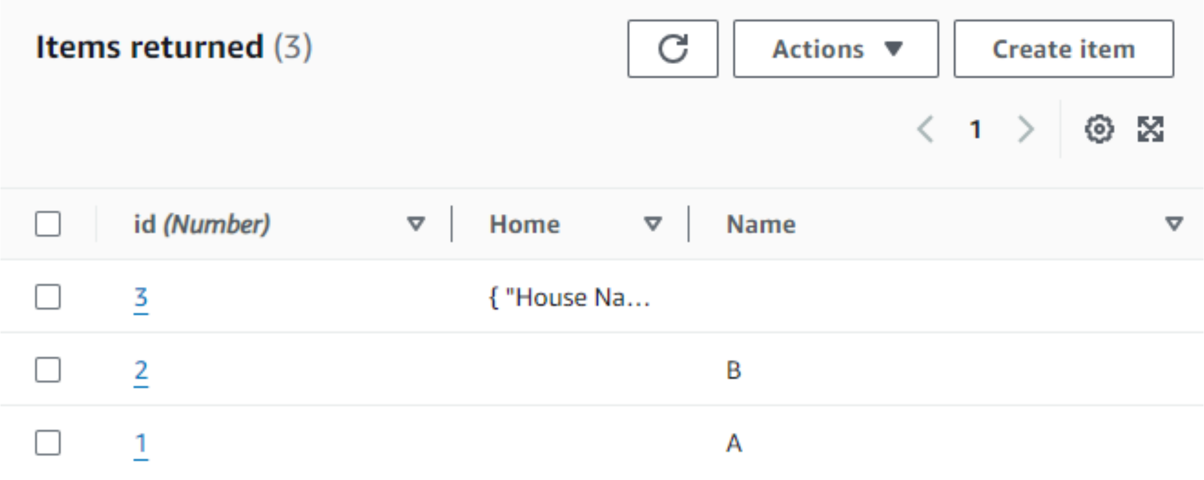
Create item

You can add, remove, or edit the attributes of an item. You can nest attributes inside other attributes up to 32 levels deep. Learn more

Attributes

Attribute name	Value	Type
id - *Partition key*	1	Number

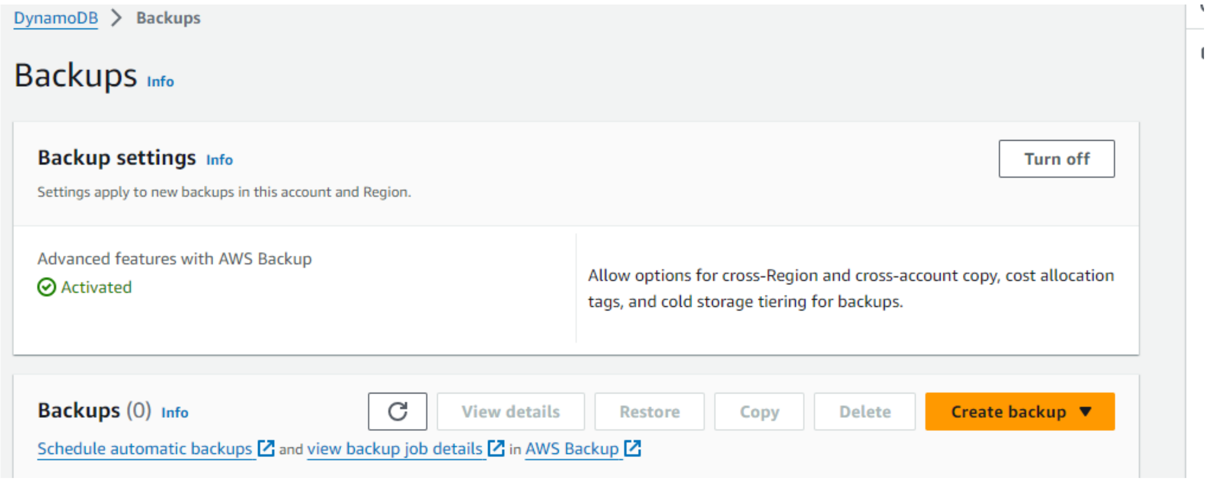
Create similarly items



Items returned (3)

□	id *(Number)*	Home	Name
□	3	{ "House Na…	
□	2		B
□	1		A

Now Create the Backups



Backups Info

Backup settings Info

Settings apply to new backups in this account and Region.

Advanced features with AWS Backup

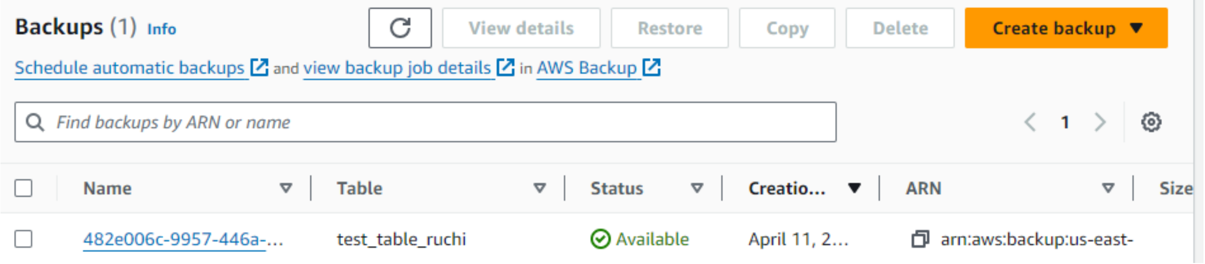
✓ Activated

Allow options for cross-Region and cross-account copy, cost allocation tags, and cold storage tiering for backups.

Backups (0) Info

Schedule automatic backups and view backup job details in AWS Backup

Now the Table is ready to take the backups after it is deleted.


Backups (1) Info

Schedule automatic backups and view backup job details in AWS Backup

Find backups by ARN or name

□	Name	Table	Status	Creatio...	ARN	Size
□	482e006c-9957-446a-...	test_table_ruchi	✓ Available	April 11, 2...	arn:aws:backup:us-east-	

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Aurora Assignment

Problem Statement:

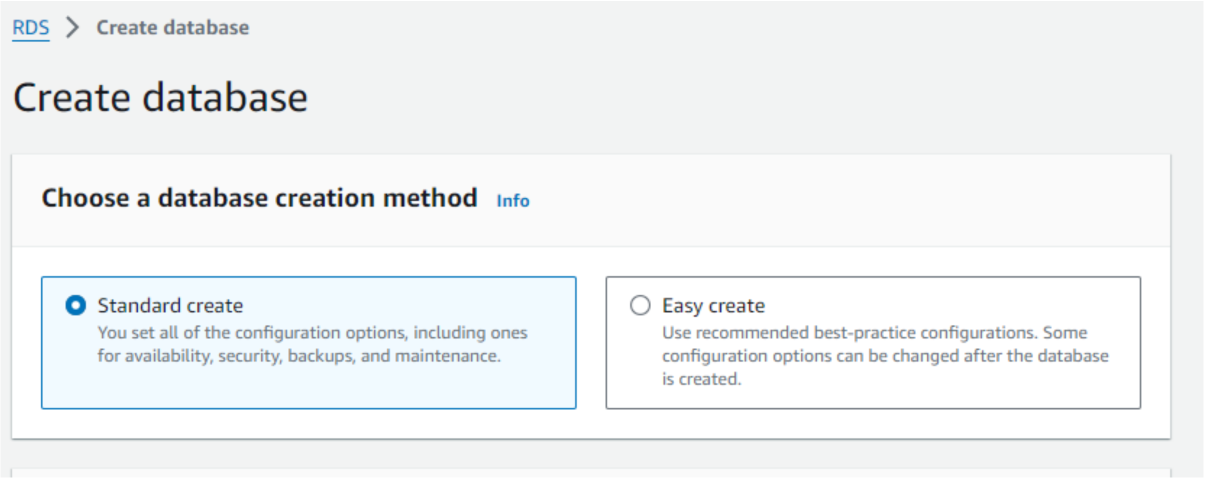
You work for XYZ Corporation. Their application requires a SQL service that can store data which can be retrieved if required. Implement a suitable RDS engine for the same. While migrating, you are asked to perform the following tasks:

1. Create an AuroraDB Engine based RDS Database.

2. Create 2 Read Replicas in different availability zones for better infrastructure availability

Solution:

Create the Database



RDS > Create database

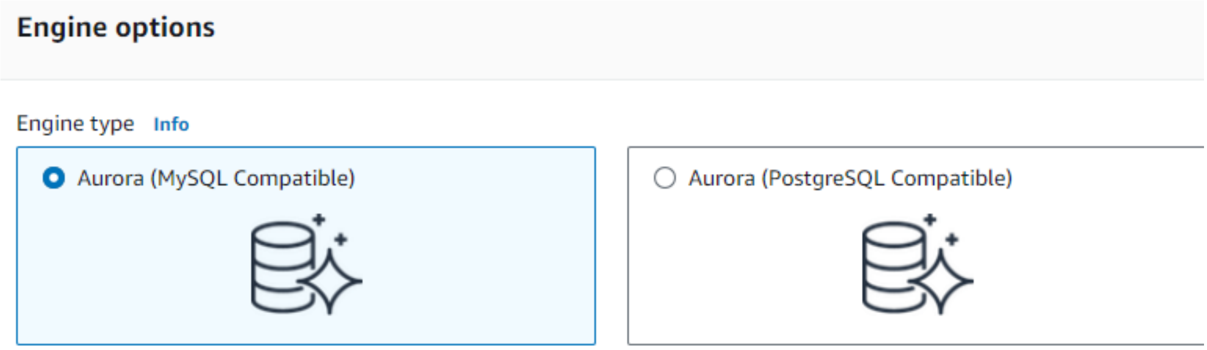
Create database

Choose a database creation method Info

● 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.

Choose the engine as Aurora



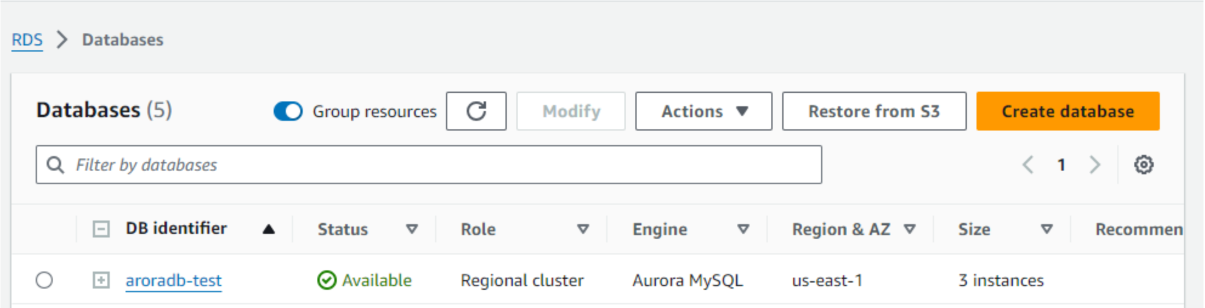
Engine options

Engine type Info

● Aurora (MySQL Compatible)

○ Aurora (PostgreSQL Compatible)

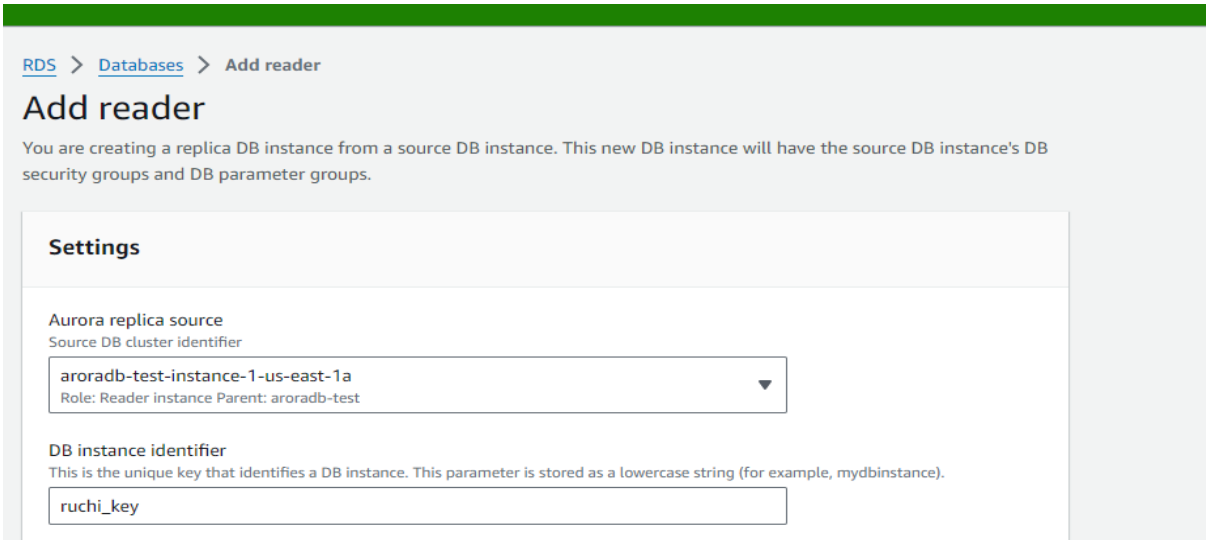
Give all the details and create the Aurora database



Databases (5)

	DB identifier ▲	Status	Role	Engine	Region & AZ	Size	Recommen
○	aroradb-test	✓ Available	Regional cluster	Aurora MySQL	us-east-1	3 instances	

Then add the Read replicas to the database for 2 different availability zones for better infrastructure



Add reader

You are creating a replica DB instance from a source DB instance. This new DB instance will have the source DB instance's DB security groups and DB parameter groups.

Settings

Aurora replica source
Source DB cluster identifier
aroradb-test-instance-1-us-east-1a
Role: Reader instance Parent: aroradb-test

DB instance identifier
This is the unique key that identifies a DB instance. This parameter is stored as a lowercase string (for example, mydbinstance).
ruchi_key

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