

Mariia Markina

Задание: поднять и тут же опустить малти АЗ Аврора кластер. (не забыть выбрать минимальные ВМ шейпы. не забыть НЕ делать снапшоты и финальные снапшоты).

Creating aurora database:

aws Services Resource Groups MariaMarkinaV Ohio Support

We listened to your feedback! Now, create a database with a single click using our pre-built configurations! Or choose your own configurations. [Share your feedback](#) [Switch to your original interface.](#)

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.


Engine options


Engine type [Info](#)


☒ **Amazon Aurora**


☐ **MySQL**


☐ **MariaDB**


☐ **PostgreSQL**


☐ **Oracle**


☐ **Microsoft SQL Server**


Edition


☒ **Amazon Aurora with MySQL compatibility**

☐ **Amazon Aurora with PostgreSQL compatibility**


Version [Info](#)

Aurora (MySQL)-5.6.10a ▼

Database features are supported with specific engine versions. [Info](#)



Services
Resource Groups


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Database features are supported with specific engine versions: [Info](#)

Database Location

☒ **Regional**
You provision your Aurora database in a single AWS Region.

☐ **Global**
You can provision your Aurora database in multiple AWS Regions. Writes in the primary AWS Region are replicated with typical latency of less than 1 sec to secondary AWS Regions.

Database features

☒ **One writer and multiple readers**
Supports multiple reader instances connected to the same storage volume as a single writer instance. This is a good general-purpose option for most workloads.

☐ **One writer and multiple readers - Parallel query**
Improves the performance of analytic queries by pushing processing down to the Aurora storage layer. This is a good option for hybrid transactional/analytic workloads.

☐ **Multiple writers**
Supports multiple writer instances connected to the same storage volume. This is a good option for when continuous writer availability is required.

☐ **Serverless**
You specify the minimum and maximum amount of resources needed, and Aurora scales the capacity based on database load. This is a good option for intermittent or unpredictable workloads.

Templates

Choose a sample template to meet your use case.

☐ **Production**
Use defaults for high availability and fast, consistent performance.

☒ **Dev/Test**
This instance is intended for development use outside of a production environment.

Settings

DB cluster identifier [Info](#)
Type a name for your DB cluster. The name must be unique across all DB clusters owned by your AWS account in the current AWS Region.

The DB cluster identifier is case-insensitive, but is stored as all lowercase (as in "mydbcluster"). Constraints: 1 to 60 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

Selecting the smallest instance:

DB instance size

DB instance class [Info](#)

Choose a DB instance class that meets your processing power and memory requirements. The DB instance class options below are limited to those supported by the engine you selected above.

- ☐ Memory Optimized classes (includes r and x classes)
- ☒ Burstable classes (includes t classes)

db.t2.small
1 vCPUs 2 GiB RAM Not EBS Optimized ▼

- ☐ Include previous generation classes

Availability & durability

Multi-AZ deployment [Info](#)

- ☒ Create an Aurora Replica or Reader node in a different AZ (recommended for scaled availability)
Creates an Aurora Replica for fast failover and high availability.
- ☐ Don't create an Aurora Replica

Connectivity



Virtual private cloud (VPC) [Info](#)

VPC that defines the virtual networking environment for this DB cluster.

Default VPC (vpc-762afe1d) ▼

Only VPCs with a corresponding DB subnet group are listed.

After a database is created, you can't change the VPC selection.

▼ Additional connectivity configuration

Subnet group [Info](#)

DB subnet group that defines which subnets and IP ranges the DB instance can use in the VPC you selected.

default ▼

default.aurora5.6

I decided to uncheck many additional options (e.g. encryption, etc), so that this database be simple and small:

Option group [Info](#)

default:aurora-5-6 ▾

Failover priority

No preference ▾

Backup

Creates a point in time snapshot of your database

Backup retention period [Info](#)

Choose the number of days that RDS should retain automatic backups for this instance.

7 days ▾

☐ Copy tags to snapshots

Encryption

☐ Enable EncryptionChoose to encrypt the given instance. Master key ids and aliases appear in the list after they have been created using the Key Management Service(KMS) console. [Info](#)

Backtrack

Backtrack lets you quickly rewind the DB cluster to a specific point in time, without having to create another DB cluster. [Info](#)☐ Enable Backtrack

Enabling Backtrack will charge you for storing the changes you make for backtracking.

Monitoring

☒ Enable Enhanced monitoring

Enabling Enhanced monitoring metrics are useful when you want to see how different processes or threads use the CPU

Granularity

60 seconds ▾

Monitoring Role

default ▾

Clicking "Create database" will authorize RDS to create the IAM role rds-monitoring-role

Log exports


Select the log types to publish to Amazon CloudWatch Logs

- ☐ Audit log
- ☐ Error log
- ☐ General log
- ☐ Slow query log

IAM role

The following service-linked role is used for publishing logs to CloudWatch Logs.

RDS Service Linked Role

-  Ensure that General, Slow Query, and Audit Logs are turned on. Error logs are enabled by default. [Learn more](#)

Maintenance

Auto minor version upgrade [Info](#)

- ☐ **Enable auto minor version upgrade**
Enabling auto minor version upgrade will automatically upgrade to new minor versions as they are released. The automatic upgrades occur during the maintenance window for the database.

Maintenance window [Info](#)

Select the period you want pending modifications or maintenance applied to the database by Amazon RDS.

- ☐ Select window
- ☒ **No preference**

Deletion protection

- ☐ **Enable deletion protection**
Protects the database from being deleted accidentally. While this option is enabled, you can't delete the database.

Working database:

Successfully created database markinamariadb. [View credential details](#)

RDS > Databases > markinamariadb

markinamariadb Modify Actions

Related

Filter databases

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU	Current activity	Maintenance	VPC	Multi-AZ	Replica lag
markinamariadb	Regional	Aurora MySQL	us-east-2	2 instances	Available	-		none	-	-	-
markinamariadb-instance-1	Writer	Aurora MySQL	us-east-2a	db.t2.small	Creating	-		none	vpc-762afe1d	2 Zones	-
markinamariadb-instance-1-us-east-2b	Reader	Aurora MySQL	us-east-2b	db.t2.small	Creating	-		none	vpc-762afe1d	2 Zones	-

Connectivity & security

Monitoring

Logs & events

Configuration

Maintenance & backups

Tags

Endpoints (2)

Filter endpoint

Endpoint name	Status	Type	Port
markinamariadb.cluster-c2z6j61kkzu.us-east-2.rds.amazonaws.com	Creating	Writer	3306
markinamariadb.cluster-ro-c2z6j61kkzu.us-east-2.rds.amazonaws.com	Creating	Reader	3306

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU	Current activity	Maintenance	VPC	Multi-AZ	Replica lag
markinamariadb	Regional	Aurora MySQL	us-east-2	2 instances	Available	-		none	-	-	-
markinamariadb-instance-1	Writer	Aurora MySQL	us-east-2a	db.t2.small	Available	8.85%	2 Selects/Sec	none	vpc-762afe1d	2 Zones	-
markinamariadb-instance-1-us-east-2b	Reader	Aurora MySQL	us-east-2b	db.t2.small	Available	9.15%	1 Selects/Sec	none	vpc-762afe1d	2 Zones	24.966 Milliseconds

Tried to create cross region read replica:

source Groups

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Support

Successfully created database markinamariadb. View credential details

RDS > Databases > markinamariadb-instance-1 > Create cross region read replica

Create cross region read replica

Creating a new cross region replica will also create a new Aurora cluster in the target region. If the replication is disrupted, you will have to set up again. It is recommended that you select "Multi-AZ Deployment" to ensure high availability for the target cluster. Note that you will incur charges based on the target region's pricing. Please see [Aurora pricing](#) for more details.

Instance specifications

DB instance class
Contains the compute and memory capacity of the DB instance.

db.t2.small — 1 vCPU, 2 GiB RAM

Multi-AZ deployment
Specifies if the DB instance should have a standby deployed in another availability zone.

☒ Yes

☐ No

Network & Security

Destination region
The region in which the replica will be launched

US West (Oregon)

Destination DB subnet group

The Amazon VPC and DB subnet group required for the Read Replica do not exist in the destination region.
[Create an Amazon VPC and DB subnet group in the destination region.](#)

Publicly accessible

☐ Yes
EC2 instances and devices outside of the VPC hosting the DB instance will connect to the DB instances. You must also select one or more VPC security groups that specify which EC2 instances and devices can connect to the DB instance.

☒ No
DB instance will not have a public IP address assigned. No EC2 instance or devices outside of the VPC

Due to the error above, decided not to add this replica in the end (I am not sure about costs for mentioned resources, so decided not to take the risk).

Settings

Read replica source

Source DB instance Identifier

markinamariadb-instance-1 (DB cluster: markinamariadb) ▾

DB instance identifier

DB instance identifier. This is the unique key that identifies a DB instance. This parameter is stored as a lowercase string (e.g. mydbinstance).

mariamarkinadb2

DB cluster identifier

You may optionally specify an identifier for the DB Cluster that will be created along with your instance. If you do not provide one, a default identifier based on the instance identifier will be used. The cluster identifier is used in determining the cluster's endpoint.

mariamarkinadb2

Failover

Priority

Select a priority tier for this instance.

- During failover, Amazon RDS will promote the replica with the highest priority to primary
- If there is contention between 2 or more replicas in the same priority tier, then Amazon RDS will promote the replica that is the same size as the primary instance
- Priority tier Logic: Tier 0 > Tier 1 > ... > Tier 15

No preference ▾

Database options

Database port

Port number on which the database accepts connections.

3306

(default: 3306)

Monitoring

Enhanced monitoring

- ☐ Enable enhanced monitoring
Enhanced monitoring metrics are useful when you want to see how different processes or threads use the CPU.
- ☒ Disable enhanced monitoring

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Support

Log exports

Select the log types to publish to Amazon CloudWatch Logs

☐ Audit log

☐ Error log

☐ General log

☐ Slow query log

IAM role
The following service-linked role is used for publishing logs to CloudWatch Logs.

RDS Service Linked Role

Ensure that General, Slow Query, and Audit Logs are turned on. Error logs are enabled by default. [Learn more](#)

Performance Insights

☒ Enable Performance Insights

☐ Disable Performance Insights

Retention period [Info](#)

Default (7 days)

Master key [Info](#)

(default) aws/rds

Account
850859445345

KMS key ID
alias/aws/rds

Maintenance

Auto minor version upgrade
Specifies if the DB instance should receive automatic engine version upgrades when they are available.

☐ Yes

☒ No

Information about the endpoints:

Source Groups ▾ ⌘

RDS > Databases > markinamariadb > markinamariadb-instance-1

markinamariadb-instance-1 Modify Actions ▾

Related

Filter databases

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU	Current activity	Maintenance	VPC	Multi-AZ	Replica lag
markinamariadb	Regional	Aurora MySQL	us-east-2	2 instances	Available	-	-	none	-	-	-
markinamariadb-instance-1-us-east-2b	Reader	Aurora MySQL	us-east-2b	db.t2.small	Available	9.15%	1 Selects/Sec	none	vpc-762afe1d	2 Zones	24.966 Milliseconds
markinamariadb-instance-1	Writer	Aurora MySQL	us-east-2a	db.t2.small	Available	8.85%	2 Selects/Sec	none	vpc-762afe1d	2 Zones	-

Connectivity & security | Monitoring | Logs & events | Configuration | Maintenance | Tags

Connectivity & security

Endpoint & port

Endpoint
markinamariadb-instance-1.c2z6j61kkizu.us-east-2.rds.amazonaws.com

Port
3306

Networking

Availability zone
us-east-2a

VPC
vpc-762afe1d

Subnet group
default-vpc-762afe1d

Subnets
subnet-d35ca0b8
subnet-838518cf
subnet-f76f5a8d

Security

VPC security groups
default (sg-1972c460) (active)

Public accessibility
No

Certificate authority
rds-ca-2019

Certificate authority date
Aug 22nd, 2024

Deleting database and all resources:

markinamariadb-instance-1-us-east-2b Modify Actions ▴

Related

Filter databases

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU	Current activity	Maintenance	VPC	Multi-AZ	Replica lag
markinamariadb	Regional	Aurora MySQL	us-east-2	2 instances	Available	-	-	none	-	-	-
markinamariadb-instance-1	Writer	Aurora MySQL	us-east-2a	db.t2.small	Available	8.62%	2 Selects/Sec	none	vpc-762afe1d	2 Zones	-
markinamariadb-instance-1-us-east-2b	Reader	Aurora MySQL	us-east-2b	db.t2.small	Available	8.20%	1 Selects/Sec	none	vpc-762afe1d	2 Zones	20.808 Milliseconds

Reboot
Delete
Failover
Take snapshot

Delete markinamariadb-instance-1 instance? ✕


Are you sure you want to Delete the **markinamariadb-instance-1** DB Instance?

☐ Create final snapshot
Determines whether a final DB Snapshot is created before the DB instance is deleted.

☒ I acknowledge that upon instance deletion, automated backups, including system snapshots and point-in-time recovery, will no longer be available.

To confirm deletion, type *delete me* into the field

delete me

 We strongly recommend taking a final snapshot before instance deletion since after your instance is deleted, automated backups will no longer be available.

Cancel Delete

Source Groups ▾ ⌘

RDS > Databases

Databases Group resources Modify Actions ▾ Restore from S3 Create database

Filter databases

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU	Current activity	Maintenance	VPC	Multi-AZ
No instances found										

Checking if snapshots weren't created:

Source Groups

RDS

Snapshots

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Snapshots

ManualSystemShared with mePublicBackup serviceExports in Amazon S3

Manual snapshots (0)

ActionsTake snapshot

Filter manual snapshots

<1>

Snapshot name

DB instance or cluster

Snapshot creation time

DB Instance created time

Status

Progress

Engine

VPC

Snapshot type

No Snapshots found, you can take a snapshot using Take Snapshot button