

5 - HANDS ON: BACKUP, MULTI-AZ E READ REPLICA

BACKUPS

- Existem basicamente dois tipos de backup

- Automated > podemos habilitar esse backup ao criar a nossa database, basicamente o que ele faz é ao habilita-lo, ele pergunta se queremos um armazenamento de 1 a 35 dias. A coisa mais interessante nesse backup é o seguinte, quando queremos fazer o restore (recuperar dados) ele te pergunta na casa dos segundos qual o ponto que voce quer restaurar. É armazenado numa bucket S3 e é free.

- DB Snapshot > Tirar foto da databse de forma manual, no momento de remoção de uma database, temos como opção default a criação de um snapshot.

- No lab anterior, criamos uma database, agora iremos alterar as opções de backup dessa database.

- multi-az

- read replica


seleciona a db>clica em modify

**obs> se não habilitarmos o backup não conseguimos habilitar o sistema de read replica.

Backup

Creates a point-in-time snapshot of your database

☒ Enable automatic backups
Creates a point-in-time snapshot of your database

 Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to details [here](#).

Backup retention period [Info](#)
Choose the number of days that RDS should retain automatic backups for this instance.

10 days ▼

Backup window [Info](#)
Select the period for which you want automated backups of the database to be created by Amazon RDS.

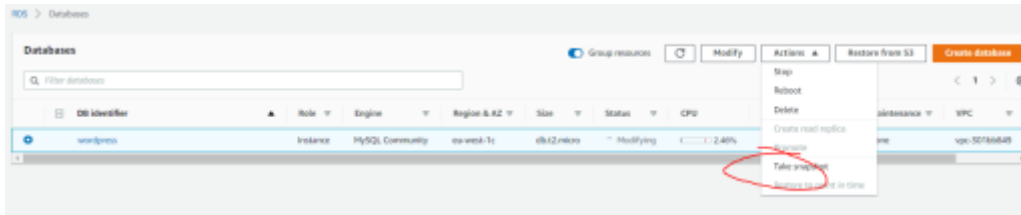
☒ Select window
☐ No preference

Start time **Duration**

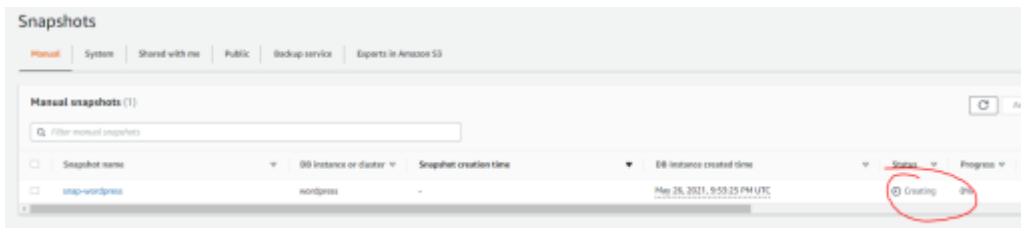
23 ▼ : 28 ▼ UTC 0.5 ▼ hours

☒ Copy tags to snapshots

- Agora como fazemos um snapshot
seleciona db> actions> take snapshot



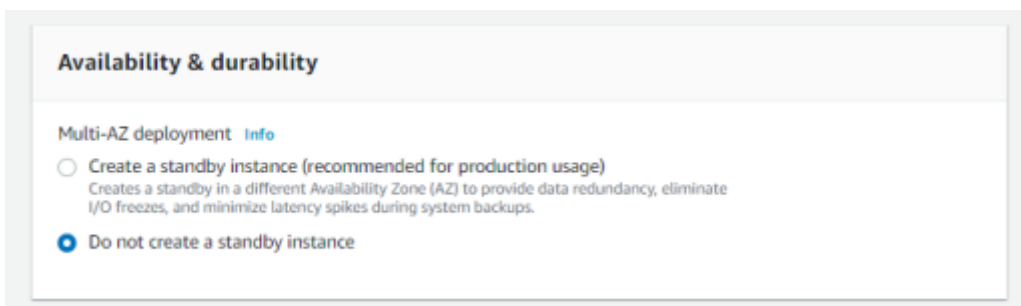
- É preciso esperar que as modificações feitas anteriormente entrem em ação para podermos fazer o snapshot.



- Como fazemos a troca da nossa DB que é padrão para:
 - MULTI-AZ
 - READ REPLICA

- Primeiro vamos entender o que a DB é agora, o status atual dela.
db> configuration

- Habilitando o MULTI-AZ
seleciona a db> modify



- Irá criar uma copia da DB em outra localidade.

Modify DB instance: wordpress

Summary of modifications

You are about to submit the following modifications. Only values that will change are displayed. Carefully verify your changes and click Modify DB Instance.

Attribute	Current value	New value
Multi-AZ deployment	No	Yes



Potential performance impact

You may experience a significant performance impact when converting this database instance to Multi-AZ configuration. This impact will be more noticeable on database instances with large amounts of storage and write-intensive workloads.

Scheduling of modifications

When to apply modifications

☒ Apply during the next scheduled maintenance window

Current maintenance window: May 31, 2021 02:08 - 02:38 UTC-3

☐ Apply immediately

The modifications in this request and any pending modifications will be asynchronously applied as soon as possible, regardless of the maintenance window setting for this database instance.

Cancel

Back

Modify DB instance

- Eles nos mandam um aviso, como você está fazendo uma MULTI-AZ do status NO para o YES, essa sua DB irá sofrer um impacto de performance, irá ficar mais lenta, sugerimos não fazer isso no momento em que a DB está sendo utilizada abram uma janela de manutenção para isso.

- Se a AZ em que a DB está agora para de funcionar, a DB será migrada para outra AZ.

READ REPLICA (BACKUP HABILITADO)

seleciona a DB>actions>create read replica

Settings

Replica source

Source DB instance identifier

wordpress

DB instance identifier

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

wordpress-replica-canada

Region

Destination Region

The Region where the replica will be launched.

Canada (Central) ▼

DB instance class

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.

- ☐ Standard classes (includes m classes)
- ☐ Memory optimized classes (includes r and x classes)
- ☒ Burstable classes (includes t classes)

db.t2.micro

1 vCPUs 1 GiB RAM Not EBS Optimized ▼

☒ Include previous generation classes

Storage

Storage type [Info](#)

General Purpose (SSD) ▼

i Provisioning less than 100 GiB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Learn more](#) [↗](#)

Storage autoscaling [Info](#)

Provides dynamic scaling support for your database's storage based on your application's needs.

- ☒ **Enable storage autoscaling**
Enabling this feature will allow the storage to increase once the specified threshold is exceeded.

Maximum storage threshold [Info](#)

Charges will apply when your database autoscales to the specified threshold

1000

GiB

Minimum: 21 GiB, Maximum: 16,384 GiB

Availability & durability


Multi-AZ deployment [Info](#)
Specifies if the DB instance should have a standby deployed in another Availability Zone.

☐ Create a standby instance (recommended for production usage)
Creates a standby in a different Availability Zone (AZ) to provide data redundancy, eliminate I/O freezes, and minimize latency spikes during system backups.

☒ Do not create a standby instance

Create read replica

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.

 **Your Read Replica creation has been initiated**

Please note that as part of cross region read replica creation we initiated a set up process, which entails creating a snapshot and transferring it to the destination region. Depending on the amount of data to be copied and the region you choose, this set up process could take several hours to complete. Click [here](#) to view your cross region read replica in the destination region. To learn more please refer to the [Cross Region Read Replica documentation](#)

[Cancel](#)

- Agora vamos verificar onde a read replica esta disponivel

seleciona db> connectivity & security

Replication (2)

Filter replication

DB instance	Role	Region & AZ	Replication source
wordpress	Primary	eu-west-1c	-
wordpress-replica-canada (Copy)	Replica	ca-central-1	wordpress