

UNIVERSIDAD PRIVADA DE TACNA
FACULTAD DE INGENIERÍA DE SISTEMAS
ESCUELA PROFESIONAL DE INGENIERÍA SISTEMAS

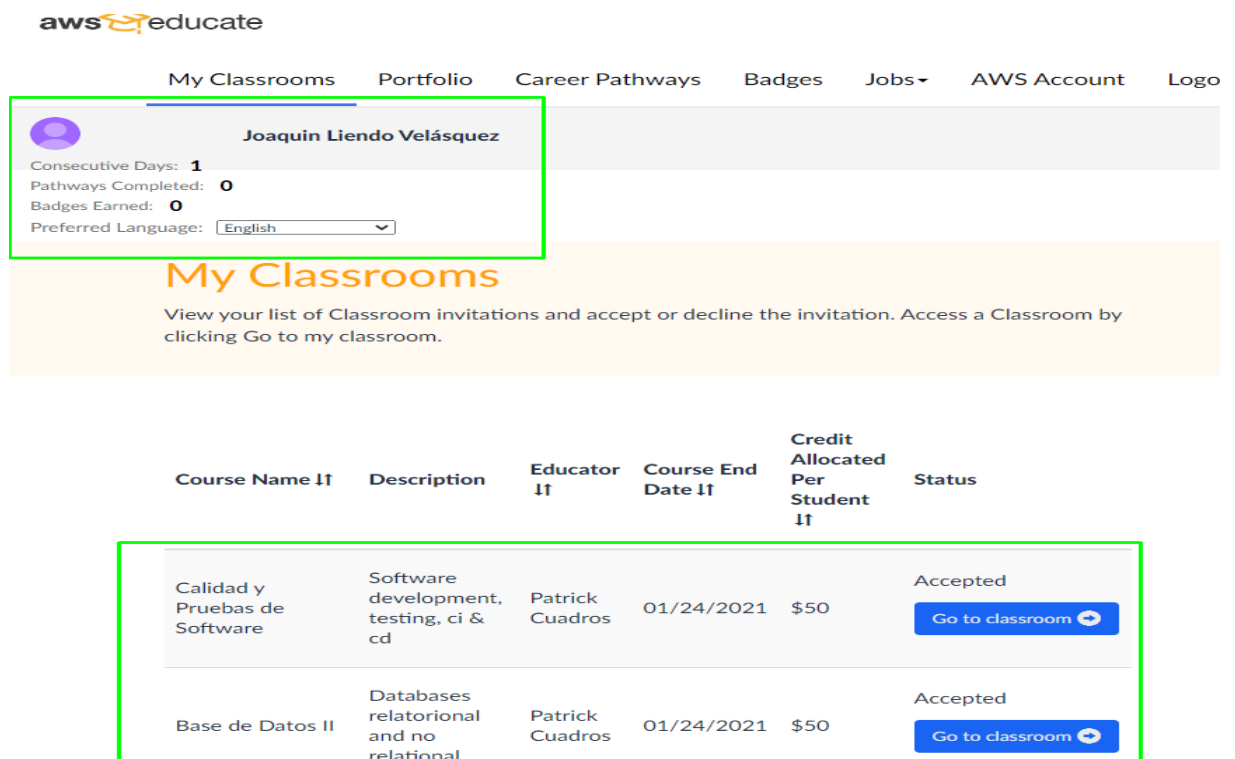


Informe N 01:
CREANDO UNA BASE DE DATOS
DOCUMENTAL

Curso: Base de Datos II (SI-775)
Docente: Ing. Patrick Cuadros Quiroga
Alumno: Liendo Velásquez , Joaquin
Codigo: 2016054463

TACNA - PERÚ
2020

- Iniciamos sesión en AWS Educate y vamos a MyClassrooms, nos saldrán las clases en las que estamos, en este caso elegiremos BD II



aws educate

My Classrooms Portfolio Career Pathways Badges Jobs AWS Account Logo

Joaquin Liendo Velásquez

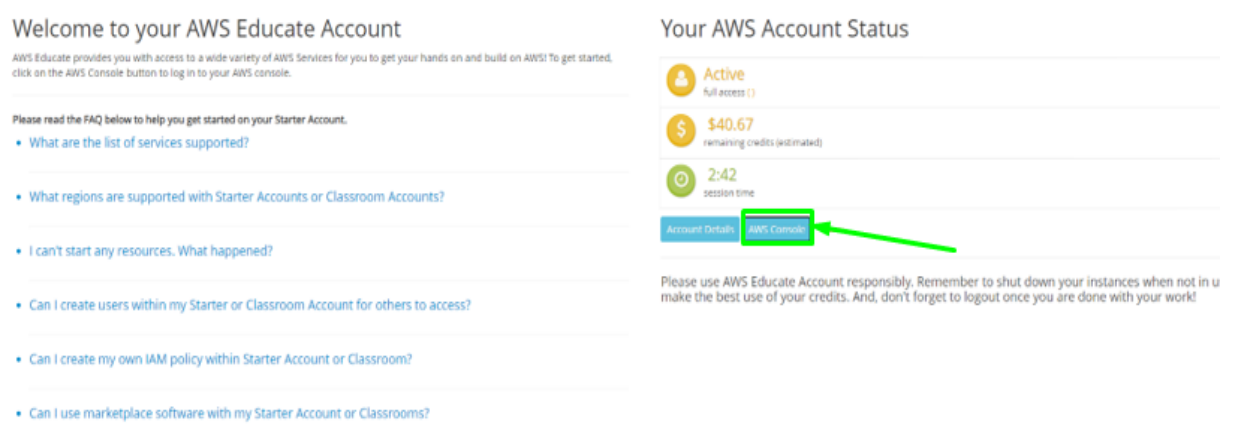
Consecutive Days: **1**
 Pathways Completed: **0**
 Badges Earned: **0**
 Preferred Language: **English**

My Classrooms

View your list of Classroom invitations and accept or decline the invitation. Access a Classroom by clicking Go to my classroom.

Course Name	Description	Educator	Course End Date	Credit Allocated Per Student	Status
Calidad y Pruebas de Software	Software development, testing, ci & cd	Patrick Cuadros	01/24/2021	\$50	Accepted Go to classroom
Base de Datos II	Databases relatorional and no relational	Patrick Cuadros	01/24/2021	\$50	Accepted Go to classroom

- Luego nos aparecerá el estado de la clase, para hacer el laboratorio elegimos AWS Console.



Welcome to your AWS Educate Account

AWS Educate provides you with access to a wide variety of AWS Services for you to get your hands on and build on AWS! To get started, click on the AWS Console button to log in to your AWS console.

Please read the FAQ below to help you get started on your Starter Account.

- What are the list of services supported?
- What regions are supported with Starter Accounts or Classroom Accounts?
- I can't start any resources. What happened?
- Can I create users within my Starter or Classroom Account for others to access?
- Can I create my own IAM policy within Starter Account or Classroom?
- Can I use marketplace software with my Starter Account or Classrooms?

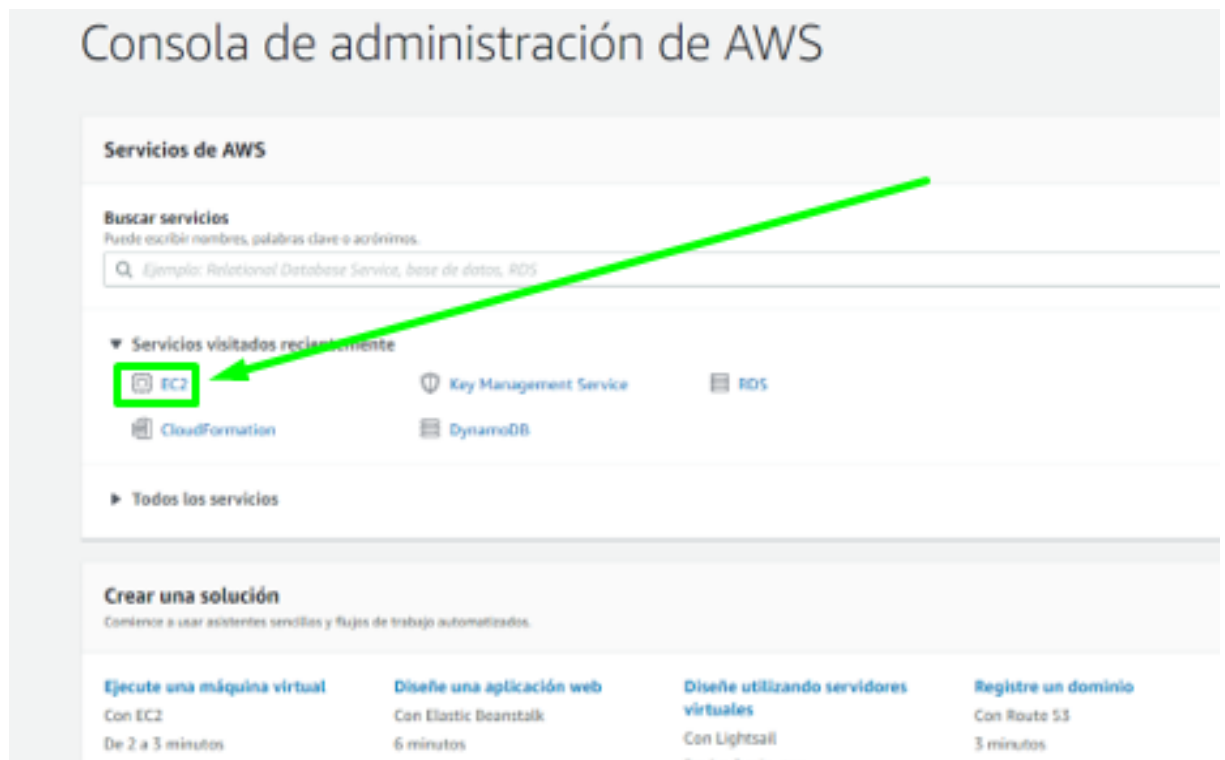
Your AWS Account Status

- Active**
Full access
- \$40.67**
remaining credits (estimated)
- 2:42**
session time

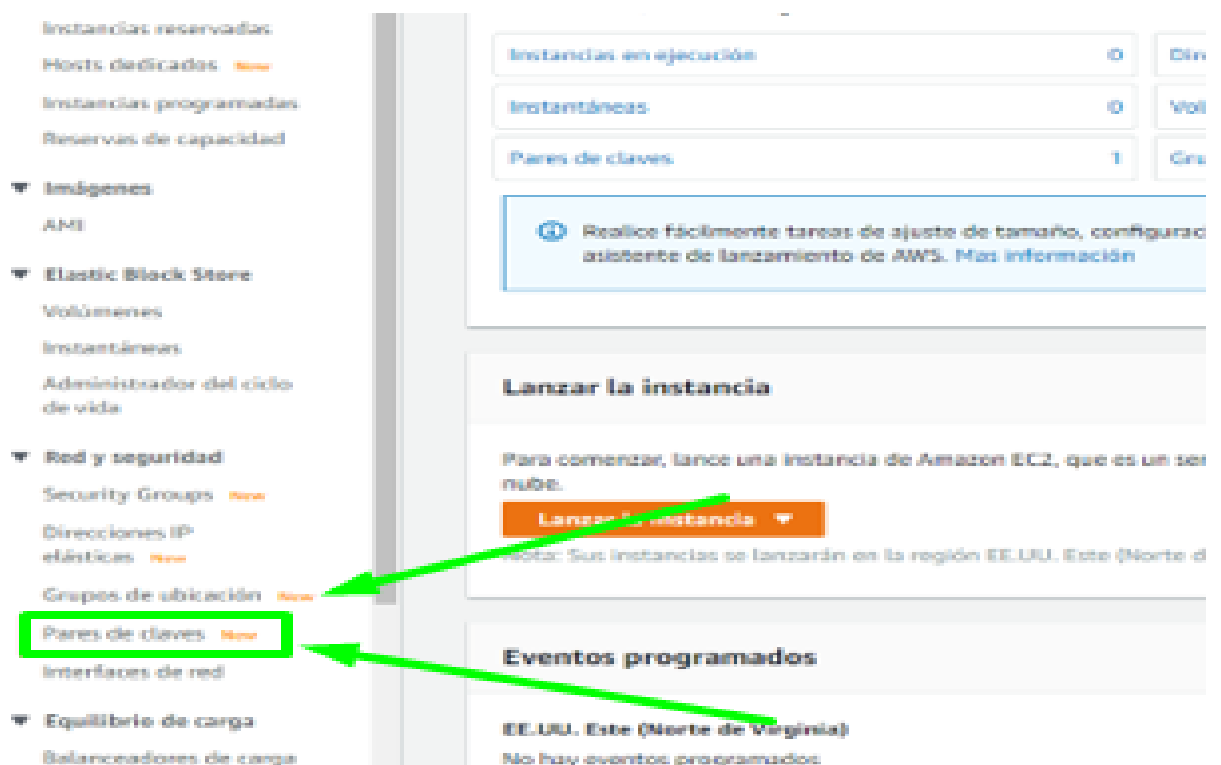
[Account Details](#) [AWS Console](#)

Please use AWS Educate Account responsibly. Remember to shut down your instances when not in use to make the best use of your credits. And, don't forget to logout once you are done with your work!

- Primero vamos a la consola.



- Ya aquí nos vamos a Pares de claves.



- Le damos nombre y en crear par de claves.

EC2 > Pares de claves > Crear par de claves

Crear par de claves

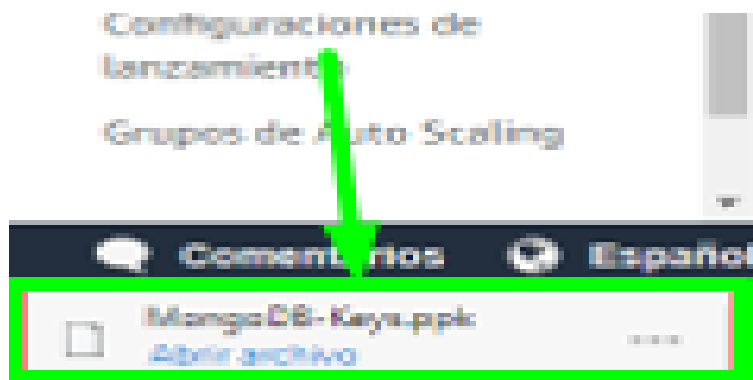
Par de claves
Un par de claves, compuesto por una clave privada y una clave pública, es un conjunto de credenciales de seguridad que se utilizan para demostrar su identidad cuando se conecta a una instancia.

Nombre
MongoDB-Keys
El nombre puede incluir hasta 255 caracteres ASCII. No puede incluir espacios al principio ni al final.

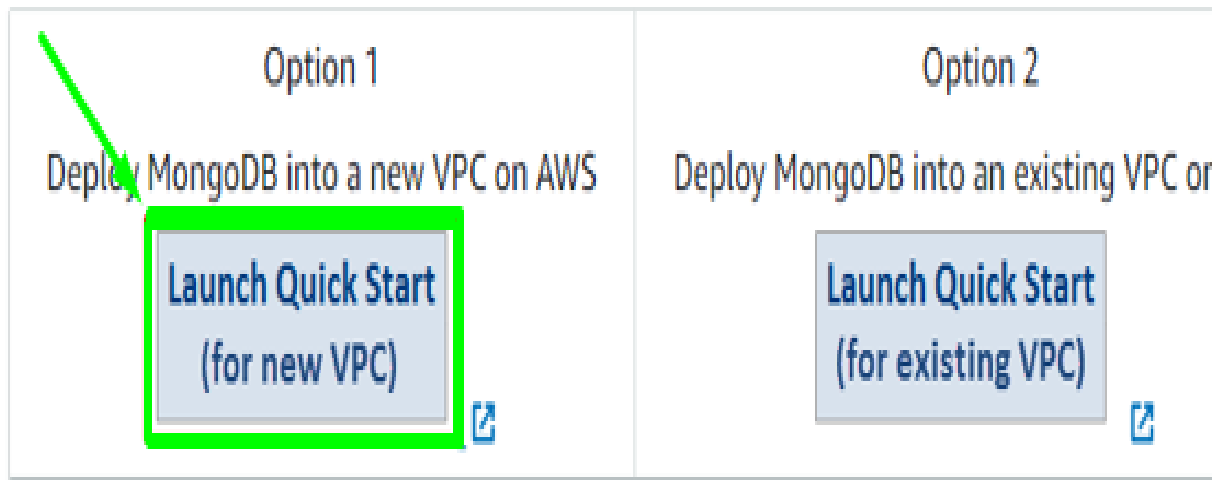
Formato de archivo
☐ pem
Para usar con OpenSSH
☒ ppk
Para usar con PuTTY

Cancelar Crear par de claves

- Una vez creado nos descargara un archivo.



- Vamos a crear una nueva plantilla AWS, elegimos una nueva y nos redirigirá a una página para crearla.



- En la página dejamos la parte de plantilla en como esta predeterminado. Y apretamos siguiente.

Prerequisite - Prepare template

Choose template

Every stack is based on a template. A template is a JSON or YAML file that contains configuration information about the AWS resources you want to include in the stack.

☒ Template is ready ☐ Use a sample template ☐ Create template in Designer

Specify template

A template is a JSON or YAML file that describes your stack's resources and properties.

Template source

Selecting a template generates an Amazon S3 URL, where it will be stored.

☒ Amazon S3 URL ☐ Upload a template file

Amazon S3 URL:

Amazon S3 template URL:

S3 URL:

- Vamos a configurar los detalles. Primero las zonas disponibles, en este caso elegiremos las 2 primeras y en el número de zonas 2.

Network Configuration

Availability Zones
List of Availability Zones to use for the subnets in the VPC. Note: The logical order is preserved, 1 or 3 AZs are used for this deployment.

us-east-1a X us-east-1b X

Number of Availability Zones
Number of Availability Zones to use in the VPC. This must match your selections in the list of Availability Zones parameter.

2

VPC CIDR
CIDR Block for the VPC

10.0.0.0/16

- Lo que viene lo dejamos por defecto.

Network Configuration

Availability Zones
List of Availability Zones to use for the subnets in the VPC. Note: The logical order is preserved, 1 or 3 AZs are used for this deployment.

us-east-1a X us-east-1b X

Number of Availability Zones
Number of Availability Zones to use in the VPC. This must match your selections in the list of Availability Zones parameter.

2

VPC CIDR
CIDR Block for the VPC

10.0.0.0/16

Private Subnet 1 CIDR
CIDR block for private subnet 1 located in Availability Zone 1.

10.0.0.0/19

Private Subnet 2 CIDR
CIDR block for private subnet 2 located in Availability Zone 2.

10.0.32.0/19

Private Subnet 3 CIDR
CIDR block for private subnet 3 located in Availability Zone 3.

10.0.64.0/19

Public Subnet 1 CIDR
CIDR block for the public DMZ subnet 1 located in Availability Zone 1

10.0.128.0/20

Public Subnet 2 CIDR
CIDR block for the public DMZ subnet 2 located in Availability Zone 2

10.0.144.0/20

Public Subnet 3 CIDR
CIDR block for the public DMZ subnet 3 located in Availability Zone 3

- En Allowed Bastion External Access CIDR, le ponemos una por defecto de aws vpc que seria 172.31.0.0/16



10.0.144.0/20

Public Subnet 3 CIDR
CIDR block for the public DMZ subnet 3 located in Availability Zone 1

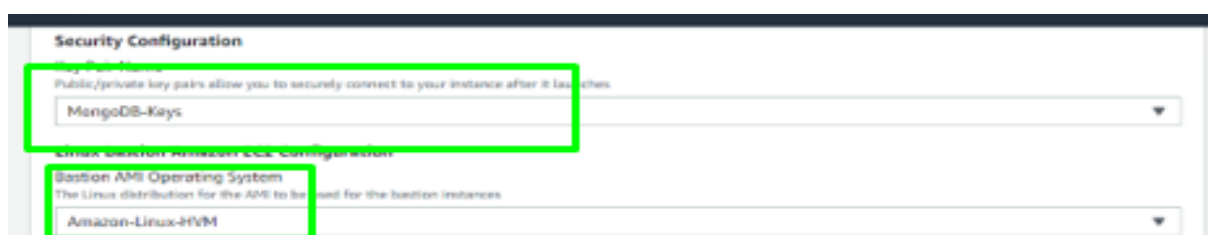
10.0.160.0/20

Allowed Bastion External Access CIDR
Allowed CIDR block for external SSH access to the bastions

172.31.0.0/16

Security Configuration

- Ahora configuraremos la seguridad, en Keir Pair name seleccionamos la que hemos creado con anterioridad



Security Configuration

KeyPair Name
Public/private key pairs allow you to securely connect to your instance after it launches.

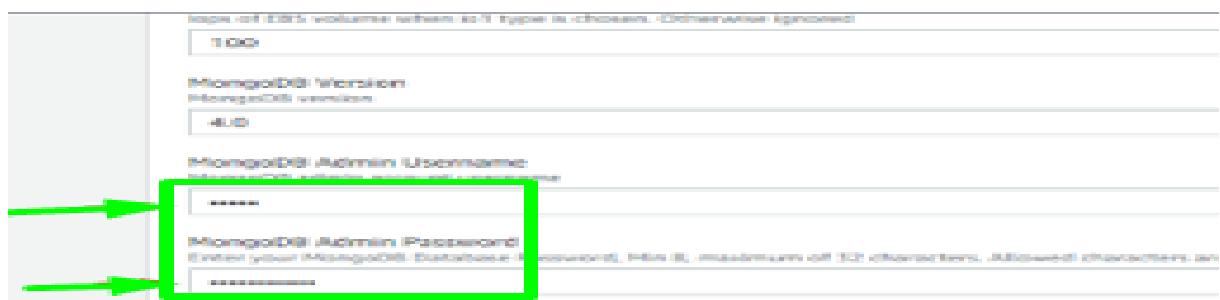
MongoDB-Keys

Linux Selection Amazon Linux 2 Configuration

Bastion AMI Operating System
The Linux distribution for the AMI to be used for the bastion instances.

Amazon-Linux-HVM

- Otra cosa que pasaremos a configurar será el admin username que por defecto será admin, y la contraseña, en mi caso será basededatos123



Size of EBS volume when io1 type is chosen. Otherwise ignored

1000

MongoDB Version
MongoDB version

4.0

MongoDB Admin Username
Username to use for MongoDB admin operations

admin

MongoDB Admin Password
Enter your MongoDB Database Username, 16 to 31, maximum of 32 characters. Allowed characters are

basededatos123

- Lo demás lo dejaríamos por defecto ya que en la mayoría de casos se ajustan a una configuración recomendada.

MongoDB admin account username

MongoDB Admin Password
Enter your MongoDB Database Password, Min 8, maximum of 32 characters. Allowed characters are: [A-Za-z0-9_@-]

Node Instance Type
Amazon EC2 instance type for the MongoDB nodes.

Replica Set Index
MongoDB replica set

EBS Volume Size
EBS Volume Size (data) to be attached to node in Gb

Volume Type
EBS Volume Type (data) to be attached to node in Gb [w/ gp2]

AWS Quick Start Configuration

Quick Start S3 Bucket Name
S3 bucket name for the Quick Start assets. Quick Start bucket name can include numbers, lowercase letters, uppercase letters, and hyphens (-). It cannot start or end with a hyphen (-).

Quick Start S3 Key Prefix
S3 key prefix for the Quick Start assets. Quick Start key prefix can include numbers, lowercase letters, uppercase letters, hyphens (-), and forward slash (/). It cannot start or end with a forward slash (/).

Quick Start S3 bucket region
The AWS Region where the Quick Start S3 bucket (QSS3BucketName) is hosted. When using your own bucket, you must specify this value.

- Aquí puede especificar etiquetas (pares clave-valor) para los recursos en su pila y establecer opciones avanzadas. Pero no lo tocaremos por ahora así que bajamos y siguiente

Tags
You can specify tags (key-value pairs) to apply to resources in your stack. You can add up to 50 unique tags for each stack. [Learn more](#)

Key Value

Add tag

Permissions
Choose an IAM role to explicitly define how CloudFormation can create, modify, or delete resources in the stack. If you don't choose a role, CloudFormation uses permissions based on your user credentials. [Learn more](#)

IAM role - optional
Choose the IAM role for CloudFormation to use for all operations performed on the stack.

IAM role name Sample-role-name Remove

Advanced options
You can set additional options for your stack, like notification options and a stack policy. [Learn more](#)

- Aquí podremos visualizar la configuración de la plantilla

Review MongoDB

Step 1: Specify template Edit

Template

Template URL
<https://aws-quickstart.s3.amazonaws.com/quickstart-mongodb/templates/mongodb-master.template>

Stack description
 Deploy MongoDB on a New VPC in AWS

Estimate cost not available

Step 2: Specify stack details Edit

Parameters (26)

Search parameters

Key	Value
AvailabilityZones	us-east-1a,us-east-1b
BastionAMIOS	Amazon-Linux-HVM
BastionInstanceType	t2.micro

- Como ya terminamos le damos click en crear

Rollback on failure
 Enabled

Timeout
 -

Termination protection
 Disabled

► Quick-create link

Capabilities

The following resource(s) require capabilities: [AWS::CloudFormation::Stack]

This template contains Identity and Access Management (IAM) resources. Check that you want to create each of these resources and that they have the minimum required permissions. In addition, they have custom names. Check that the custom names are unique within your AWS account. [Learn more](#)

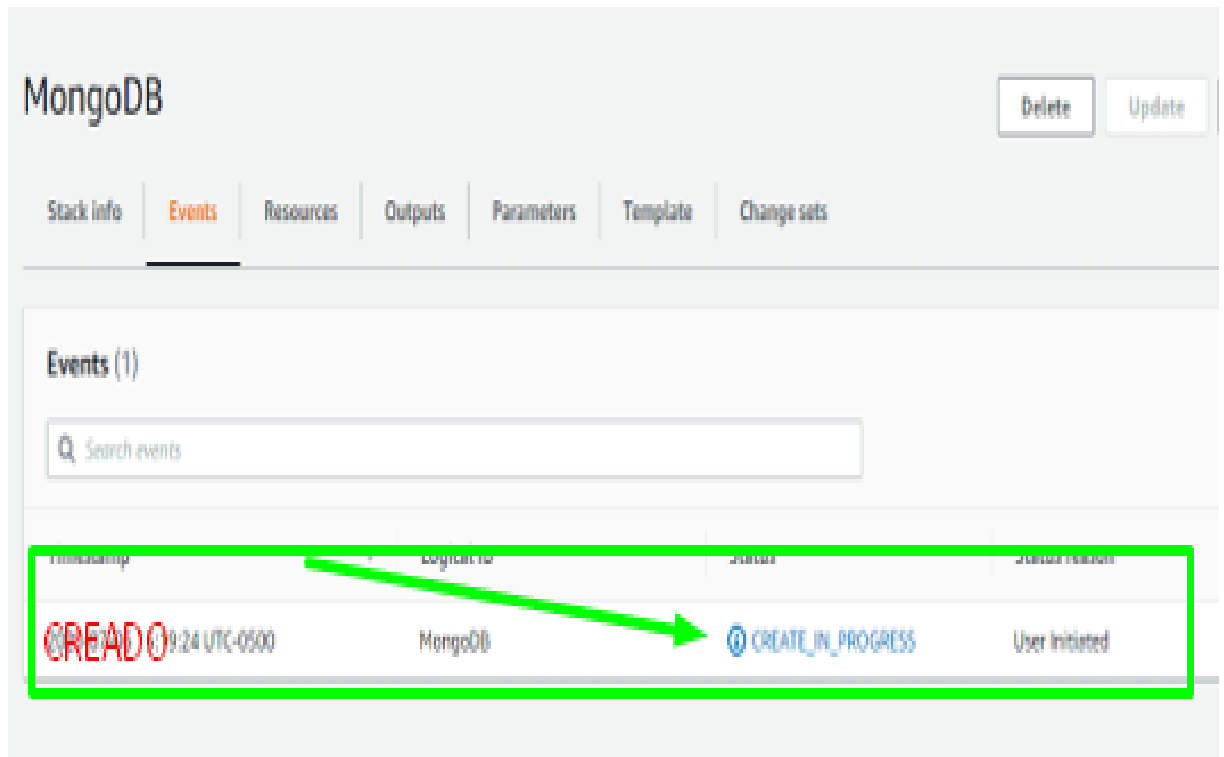
For this template, AWS CloudFormation might require an unrecognized capability: CAPABILITY_AUTO_EXPAND. Check the capabilities of these resources.

☐ I acknowledge that AWS CloudFormation might create IAM resources with custom names.

☐ I acknowledge that AWS CloudFormation might require the following capability: CAPABILITY_AUTO_EXPAND

Cancel Previous Create change set **Create stack**

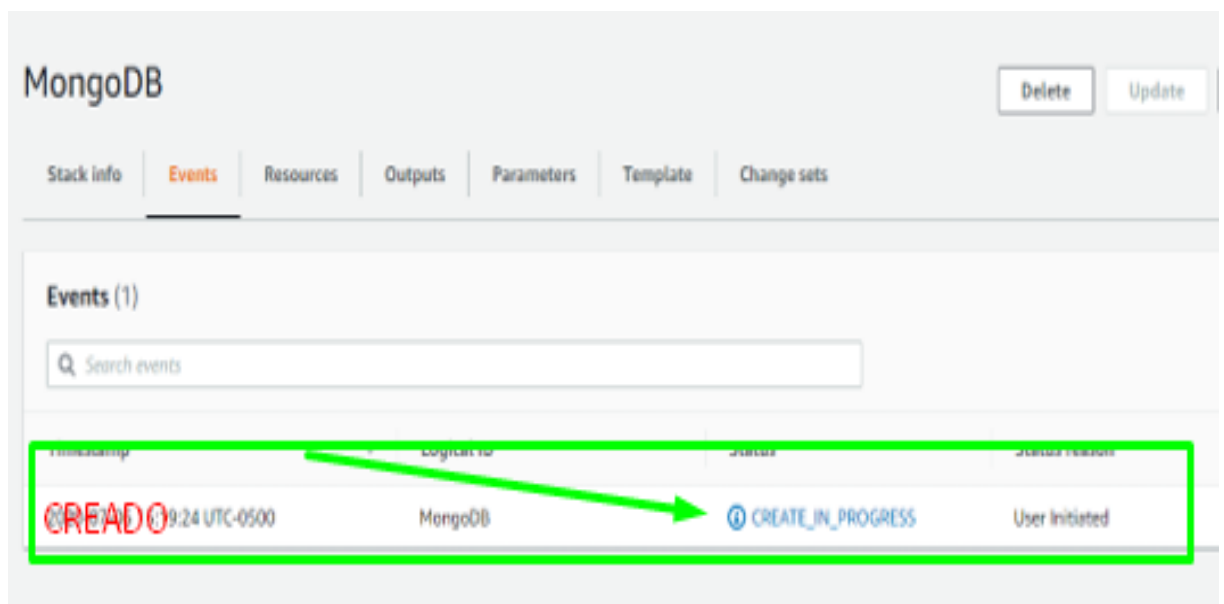
- Como vemos la creación esta en progreso



The screenshot shows the MongoDB Cloud console interface. At the top, there's a header with the 'MongoDB' logo and 'Delete' and 'Update' buttons. Below the header is a navigation bar with tabs: 'Stack info', 'Events' (highlighted), 'Resources', 'Outputs', 'Parameters', 'Template', and 'Change sets'. The main content area is titled 'Events (1)' and contains a search bar labeled 'Search events'. Below the search bar is a table with one row of event data. The table has four columns: 'Timestamp', 'Logical ID', 'Status', and 'Status Reason'. The row shows a timestamp of '9:24 UTC-0500', a logical ID of 'MongoDB', a status of 'CREATE_IN_PROGRESS' (indicated by a blue circular icon with a white 'i'), and a status reason of 'User Initiated'. A green rectangular box highlights the entire table row, and a green arrow points from the 'Timestamp' column to the 'Status' column.

Timestamp	Logical ID	Status	Status Reason
9:24 UTC-0500	MongoDB	CREATE_IN_PROGRESS	User Initiated

- Apenas esté terminada saldrá el status en CREATE_COMPLETE



This screenshot is identical to the one above, showing the MongoDB Cloud console with the 'Events' tab selected. It displays a single event in the 'Events (1)' section with the status 'CREATE_IN_PROGRESS'. A green box highlights the event row, and a green arrow points from the 'Timestamp' column to the 'Status' column.

Timestamp	Logical ID	Status	Status Reason
9:24 UTC-0500	MongoDB	CREATE_IN_PROGRESS	User Initiated