

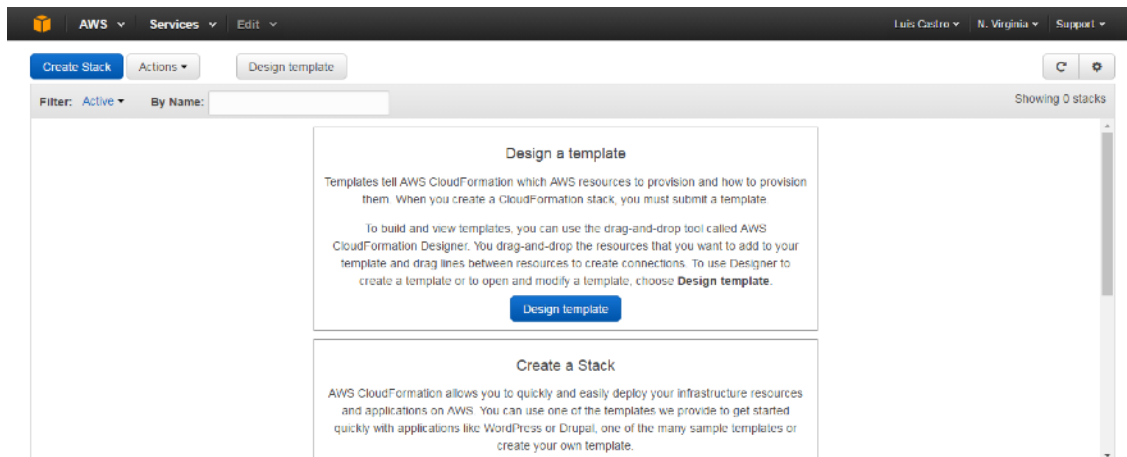
Paso 1

Acceder a la consola de AWS mediante el siguiente link:

<https://lcastrose.signin.aws.amazon.com/console>

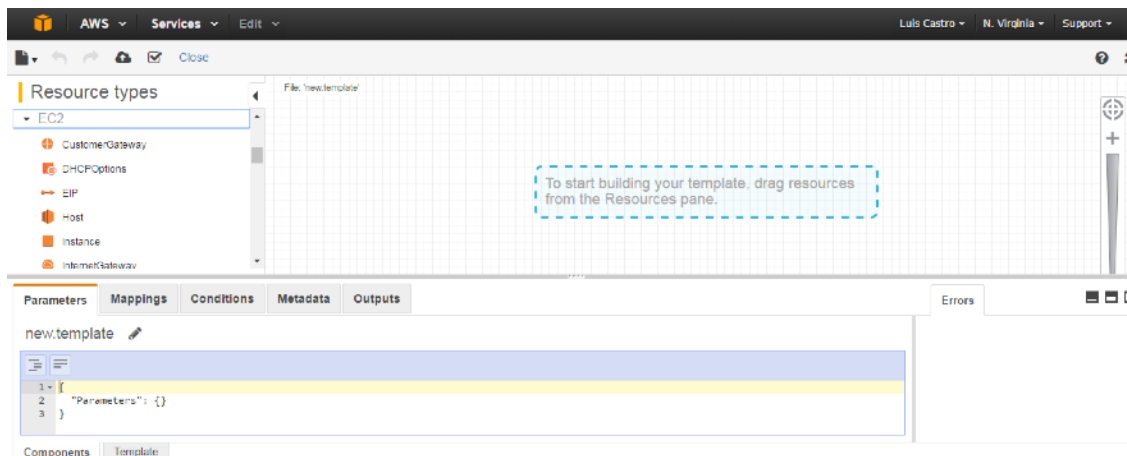
Paso 2

Ingresar al servicio de **CloudFormation** y escoger **Design Template**

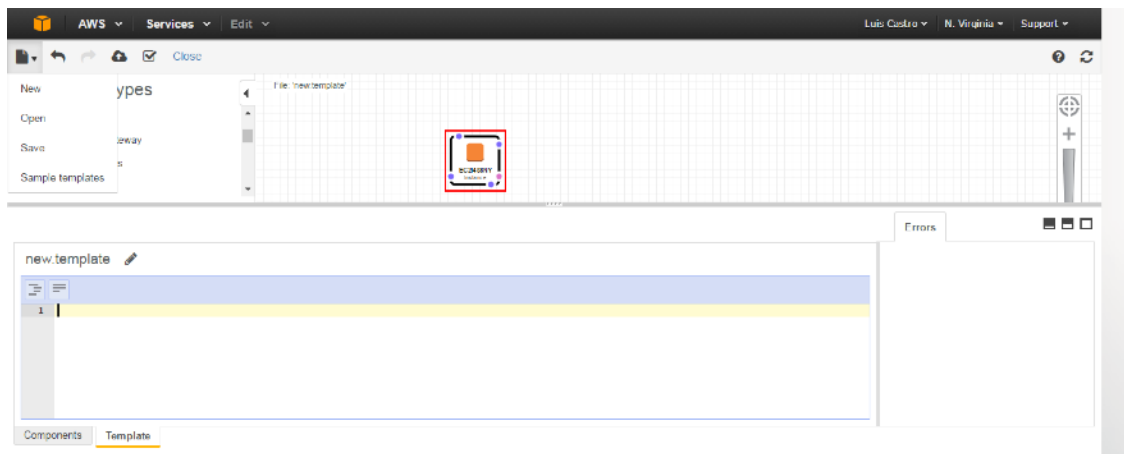


Paso 3

Dentro de **Resource Type** escoger **EC2>Instance** y arrastrar el icono al panel



Marcar la instancia y en el menú de abajo en **Properties** seleccionar **Template** y borrar el template existente

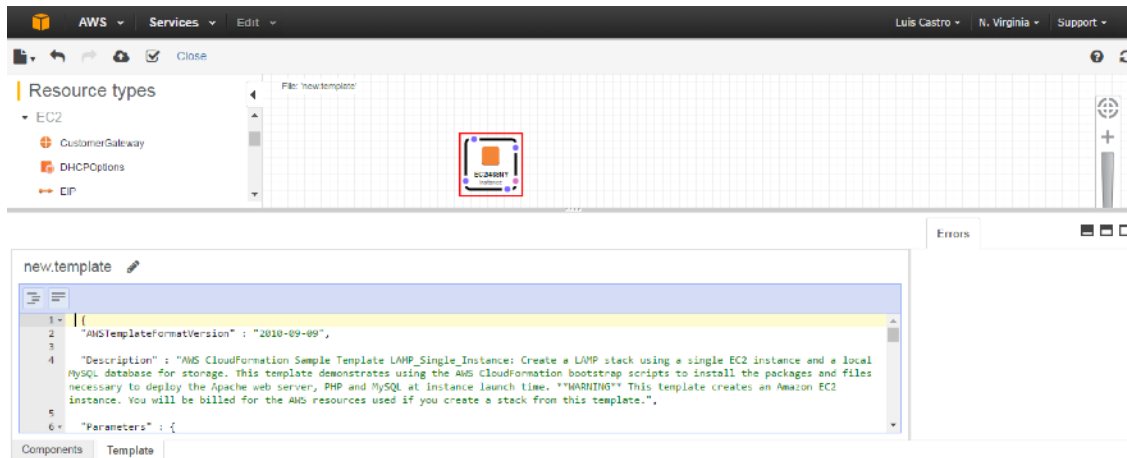


Paso 5

Del archivo enviado por correo utilice el llamado:

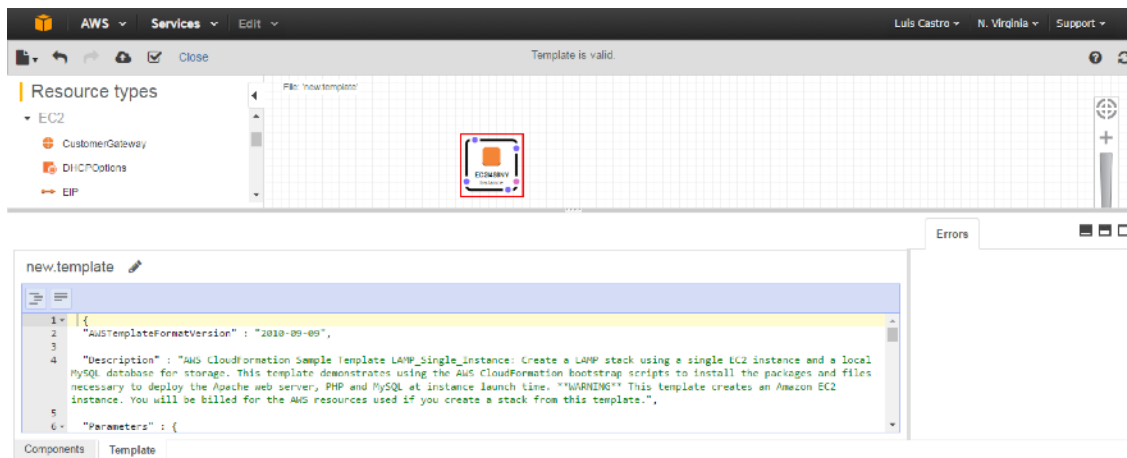
- EC2_SG.json

Copie el código y péguelo nuevamente en el campo de **Template**

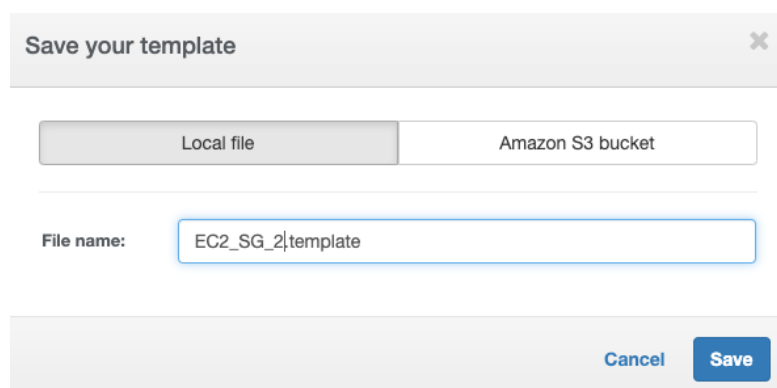
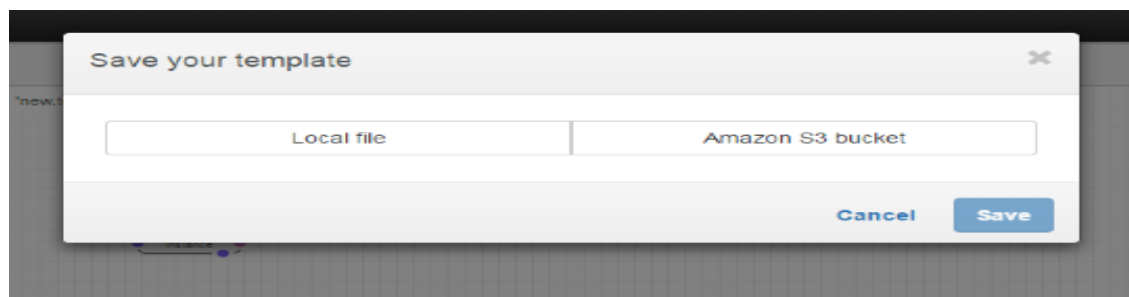


Paso 6

Haga click en el Check que se encuentran en la barra principal **“Validate Template”** y espere que se ejecute la validación del Template hasta que aparezca **“Template is Valid”**

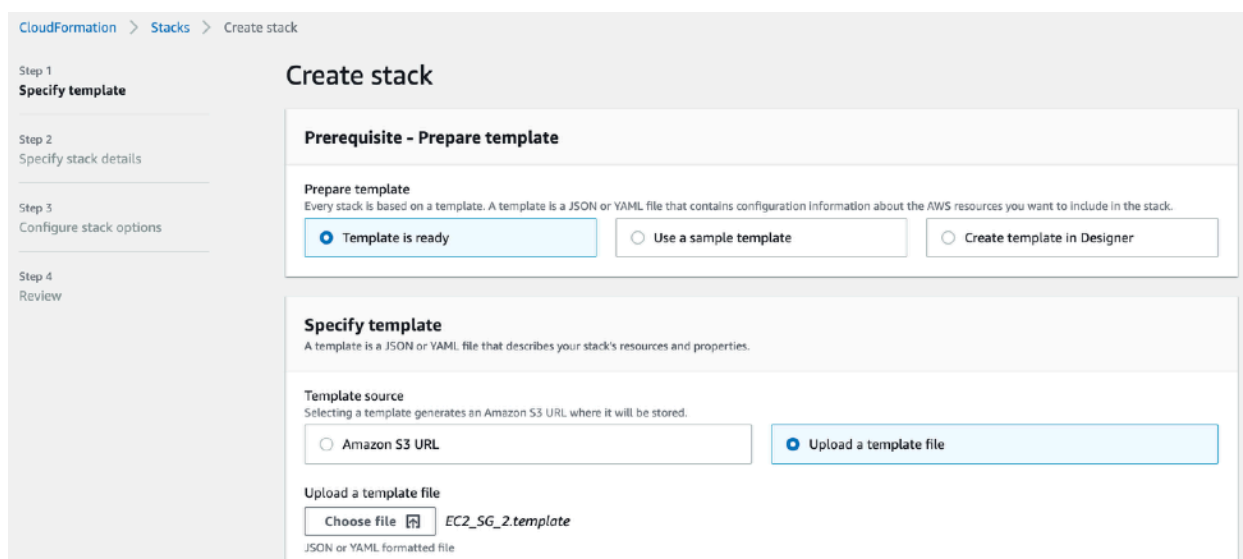


En el menú principal haga click en el icono en forma de hoja y entre en **save** para salvar el **template** con el nombre **EC2_SG_2.json**



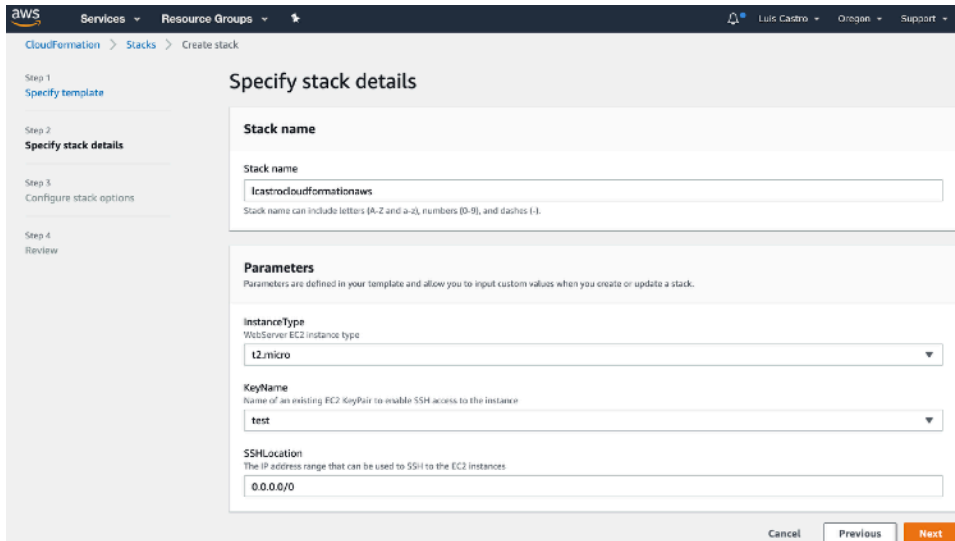
Haga Click en el icono en forma de nube de la barra principal que se llama **Create Stack**

Busque el archivo creado anteriormente **EC2_SG_2.template** y hacer click en **Next**.



Paso 9

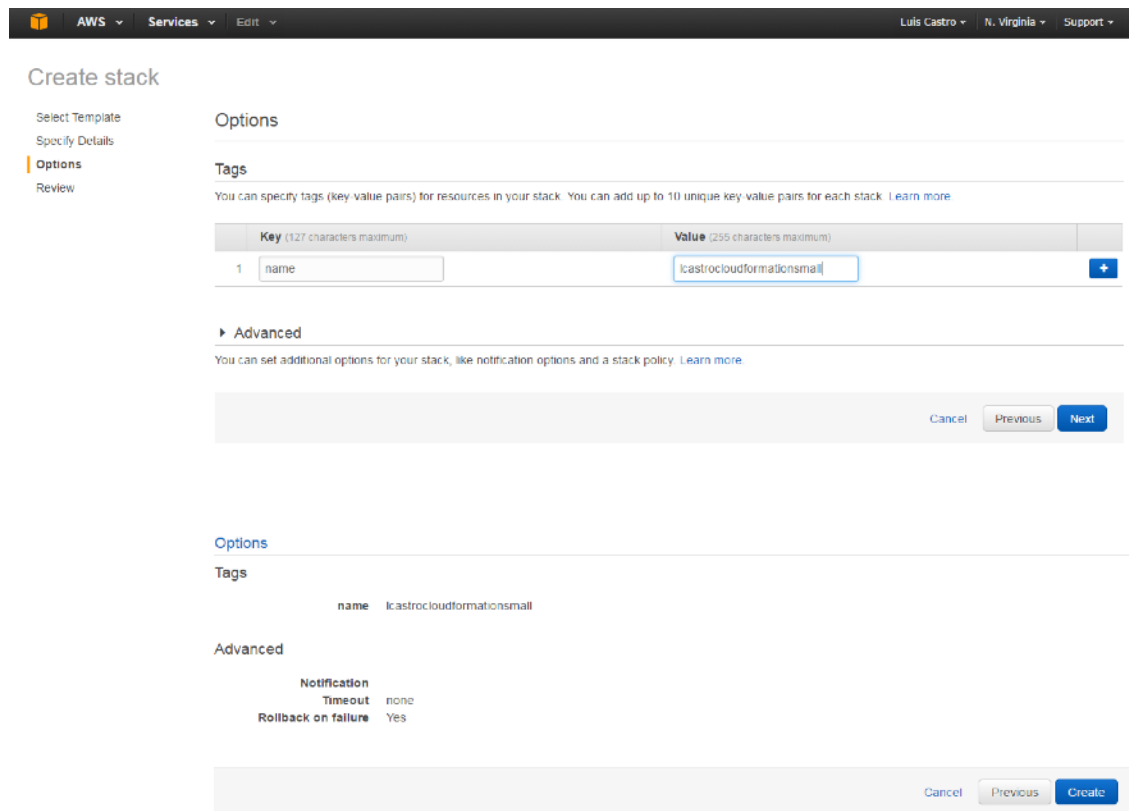
- **Stack Name**
 - Nombre de usuario + cloudformationaws
 - Ej: lcastrocloudformationaws
- **Instance Type**
 - T2.small (Verifique que por default la instancia seleccionada sea T2.small y cámbielo a t2.micro)
- **KeyName**
 - La llave SSH utilizada en el laboratorio anterior



The screenshot shows the AWS CloudFormation console interface for creating a new stack. The breadcrumb navigation at the top indicates the path: CloudFormation > Stacks > Create stack. On the left, a sidebar shows the four steps of the process: Step 1: Specify template, Step 2: Specify stack details (currently active), Step 3: Configure stack options, and Step 4: Review. The main content area is titled 'Specify stack details' and contains three sections: 'Stack name' with a text input field containing 'lcastrocloudformationaws' and a note that stack names can include letters, numbers, and dashes; 'Parameters' with a note that parameters are defined in the template; and three parameter inputs: 'InstanceType' (a dropdown menu showing 't2.micro'), 'KeyName' (a dropdown menu showing 'test'), and 'SSHLocation' (a text input field showing '0.0.0.0/0'). At the bottom right, there are three buttons: 'Cancel', 'Previous', and 'Next'.

Paso 10

- Key
 - o Name
- Value
 - o Nombre de usuario + cloudformationsmall
 - Ej: lcastrocloudformationsmall
- Create



The screenshot shows the 'Create stack' wizard in the AWS Management Console, specifically the 'Options' step. The left sidebar shows the progression: 'Select Template', 'Specify Details', 'Options' (highlighted), and 'Review'. The main content area is titled 'Options' and includes a 'Tags' section. The 'Tags' section has a table with two columns: 'Key (127 characters maximum)' and 'Value (255 characters maximum)'. The first row shows 'name' as the key and 'lcastrocloudformationsmall' as the value. Below the table is a '+ ' button to add more tags. The 'Advanced' section is collapsed. At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons. Below the screenshot, a second 'Options' section is shown, which is a simplified view of the same step, with the 'Tags' table pre-filled with the same key-value pair and the 'Advanced' section expanded to show 'Notification' (none), 'Timeout' (none), and 'Rollback on failure' (Yes). At the bottom right of this section are 'Cancel', 'Previous', and 'Create' buttons.

Create stack

Select Template
Specify Details
Options
Review

Options

Tags

You can specify tags (key-value pairs) for resources in your stack. You can add up to 10 unique key-value pairs for each stack. [Learn more](#)

	Key (127 characters maximum)	Value (255 characters maximum)	
1	name	lcastrocloudformationsmall	+

► Advanced

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

Cancel Previous Next

Options

Tags

name lcastrocloudformationsmall

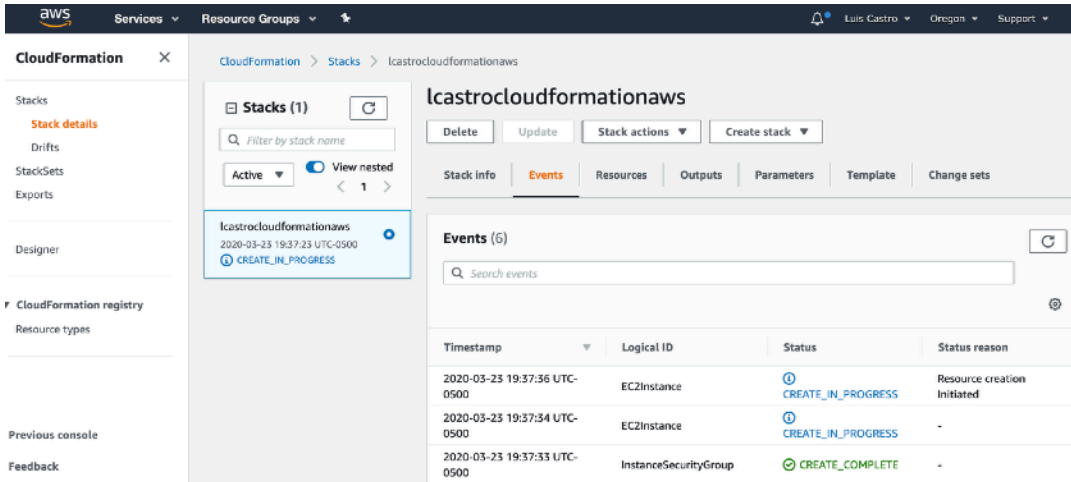
Advanced

Notification none
Timeout none
Rollback on failure Yes

Cancel Previous Create

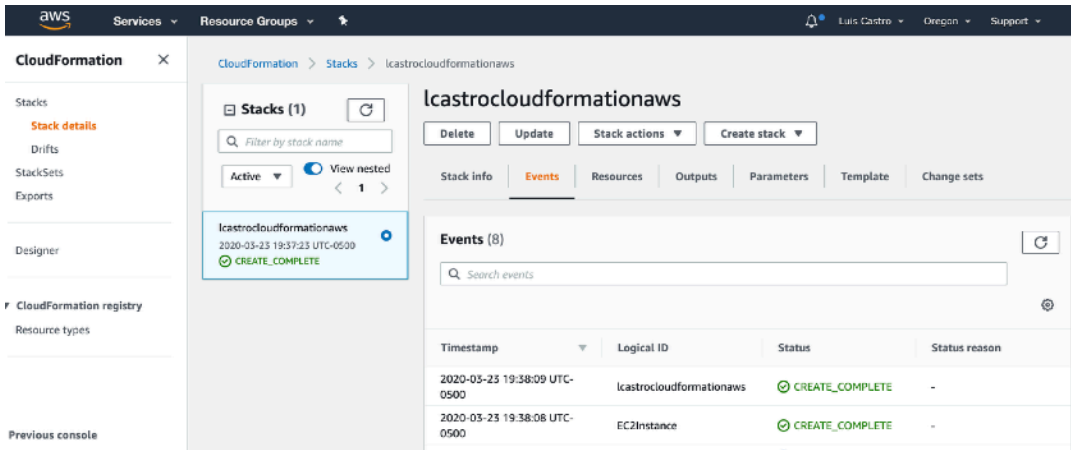
Paso 11

- Validar que el stack este siendo creado y que se este creando una maquina EC2



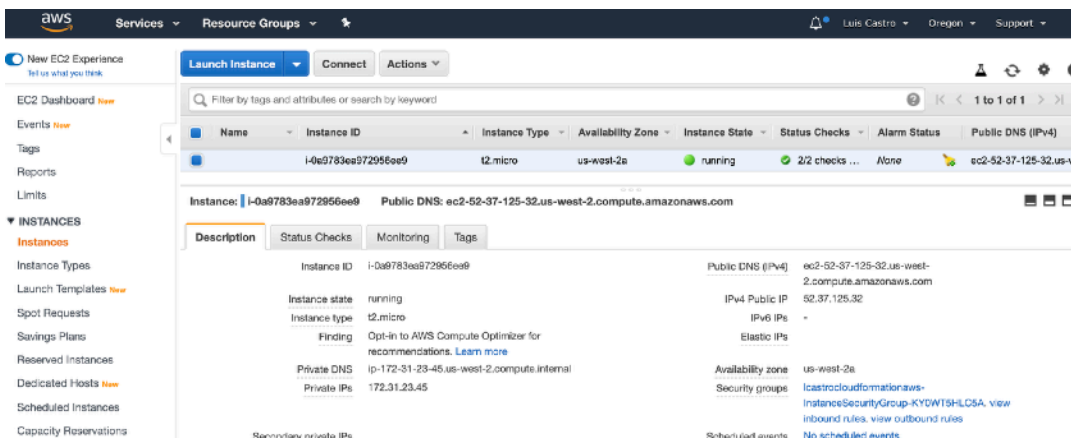
The screenshot shows the AWS CloudFormation console for the stack 'lcastrocloudformationaws'. The stack is in the 'CREATE_IN_PROGRESS' state. The 'Events' tab is selected, showing a list of events. The first event is 'Resource creation initiated' for the 'EC2Instance' resource, which is currently in the 'CREATE_IN_PROGRESS' state. The second event is 'CREATE_COMPLETE' for the 'InstanceSecurityGroup' resource, which is in the 'CREATE_COMPLETE' state.

Timestamp	Logical ID	Status	Status reason
2020-03-23 19:37:36 UTC-0500	EC2Instance	CREATE_IN_PROGRESS	Resource creation initiated
2020-03-23 19:37:34 UTC-0500	EC2Instance	CREATE_IN_PROGRESS	-
2020-03-23 19:37:33 UTC-0500	InstanceSecurityGroup	CREATE_COMPLETE	-



The screenshot shows the AWS CloudFormation console for the stack 'lcastrocloudformationaws'. The stack is now in the 'CREATE_COMPLETE' state. The 'Events' tab is selected, showing a list of events. The first event is 'CREATE_COMPLETE' for the 'lcastrocloudformationaws' stack, which is in the 'CREATE_COMPLETE' state. The second event is 'CREATE_COMPLETE' for the 'EC2Instance' resource, which is in the 'CREATE_COMPLETE' state.

Timestamp	Logical ID	Status	Status reason
2020-03-23 19:38:09 UTC-0500	lcastrocloudformationaws	CREATE_COMPLETE	-
2020-03-23 19:38:08 UTC-0500	EC2Instance	CREATE_COMPLETE	-



The screenshot shows the AWS EC2 console for the instance 'lcastrocloudformationaws'. The instance is in the 'running' state. The 'Description' tab is selected, showing details about the instance. The instance is a 't2.micro' instance in the 'us-west-2a' availability zone. The public DNS is 'ec2-52-37-125-32.us-west-2.compute.amazonaws.com'. The private DNS is 'ip-172-31-23-45.us-west-2.compute.internal'. The private IP is '172.31.23.45'.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
lcastrocloudformationaws	i-0a9783ea972956ee9	t2.micro	us-west-2a	running	2/2 checks ...	None	ec2-52-37-125-32.us-w...

Description	Status Checks	Monitoring	Tags
<p>Instance ID: i-0a9783ea972956ee9</p> <p>Instance state: running</p> <p>Instance type: t2.micro</p> <p>Finding: Opt-in to AWS Compute Optimizer for recommendations. Learn more</p> <p>Private DNS: ip-172-31-23-45.us-west-2.compute.internal</p> <p>Private IP: 172.31.23.45</p> <p>Secondary private IPs: -</p>	<p>Public DNS (IPv4): ec2-52-37-125-32.us-west-2.compute.amazonaws.com</p> <p>IPv4 Public IP: 52.37.125.32</p> <p>IPv6 IPs: -</p> <p>Elastic IPs: -</p>	<p>Availability zone: us-west-2a</p> <p>Security groups: lcastrocloudformationaws-InstanceSecurityGroup-KYDWTSHLQSA. view inbound rules, view outbound rules</p> <p>Scheduled events: No scheduled events</p>	

Paso 12

- Buscar el archivo creado anteriormente llamado:
 - o **EC2_SG_2**
- Abrir el archivo y Modificar el valor default de la maquina de **T2.Small** a **T2.Micro** de la siguiente forma:
 - o **“Default”: t2.micro**

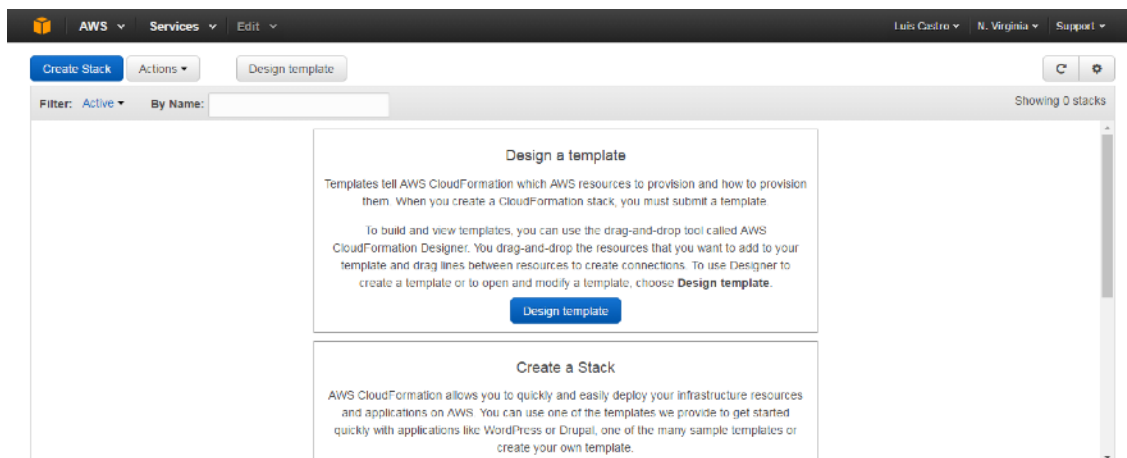
```
"Type": "String",
```

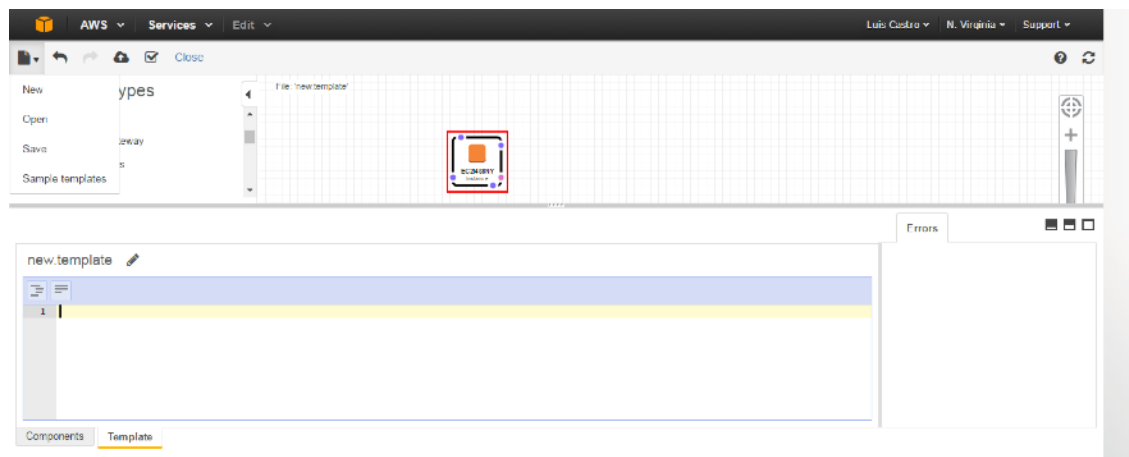
```
"Default": "t2.micro",
```

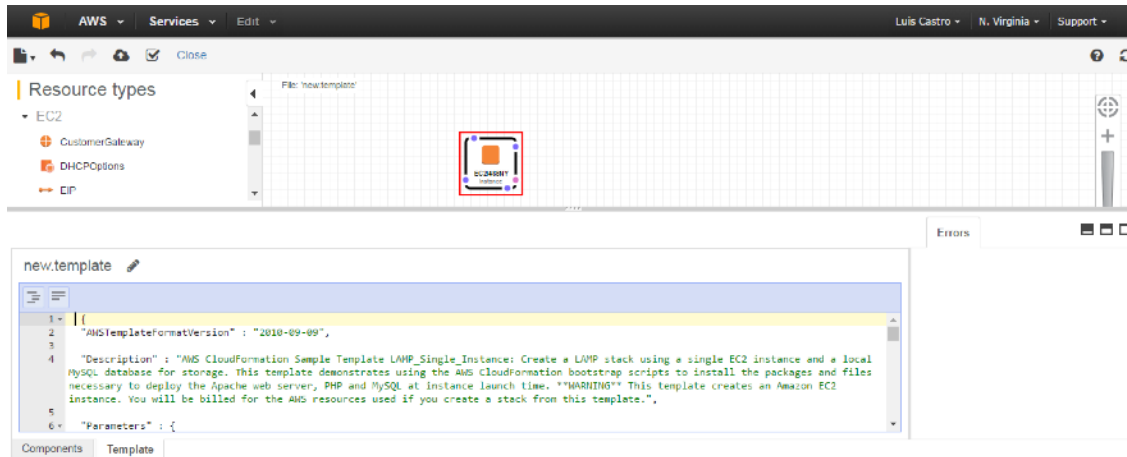
```
"AllowedValues": [ "t1.micro", "t2.nano", "t2.micro", "t2.small", "t2.medium", "t2.large",  
"m1.small", "m1.medium", "m1.large", "m1.xlarge", "m2.xlarge", "m2.2xlarge", "m2.4xlarge",  
"m3.medium", "m3.large", "m3.xlarge", "m3.2xlarge", "m4.large", "m4.xlarge", "m4.2xlarge",  
"m4.4xlarge", "m4.10xlarge", "c1.medium", "c1.xlarge", "c3.large", "c3.xlarge", "c3.2xlarge",  
"c3.4xlarge", "c3.8xlarge", "c4.large", "c4.xlarge", "c4.2xlarge", "c4.4xlarge", "c4.8xlarge",  
"g2.2xlarge", "g2.8xlarge", "r3.large", "r3.xlarge", "r3.2xlarge", "r3.4xlarge", "r3.8xlarge",  
"i2.xlarge", "i2.2xlarge", "i2.4xlarge", "i2.8xlarge", "d2.xlarge", "d2.2xlarge", "d2.4xlarge",  
"d2.8xlarge", "hi1.4xlarge", "hs1.8xlarge", "cr1.8xlarge", "cc2.8xlarge", "cg1.4xlarge"]
```

Paso 13

- Ingresar nuevamente a **CloudFormation** y escoger **Design template**
- Escoger nuevamente una instancia
- Borrar el **template default** y copiar el nuevo template con el cambio de **T2.Micro**

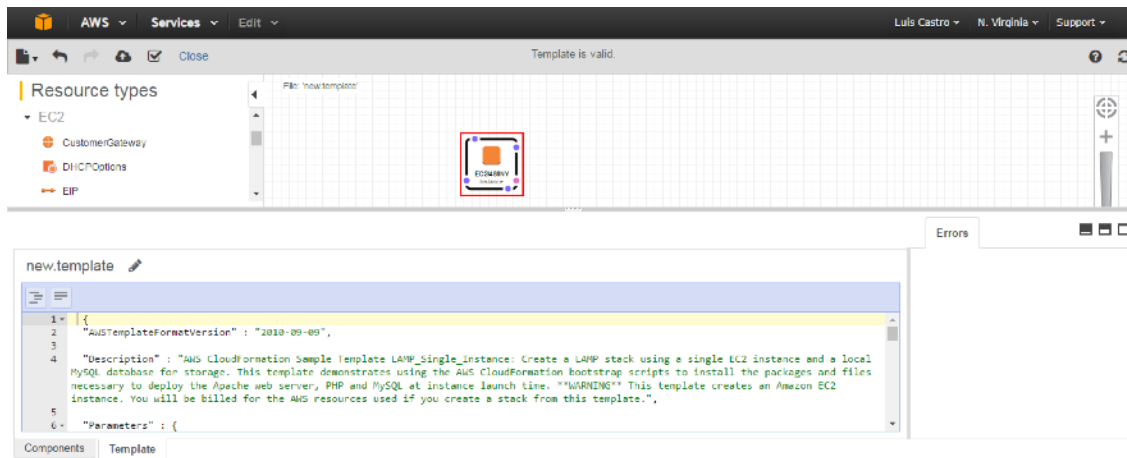




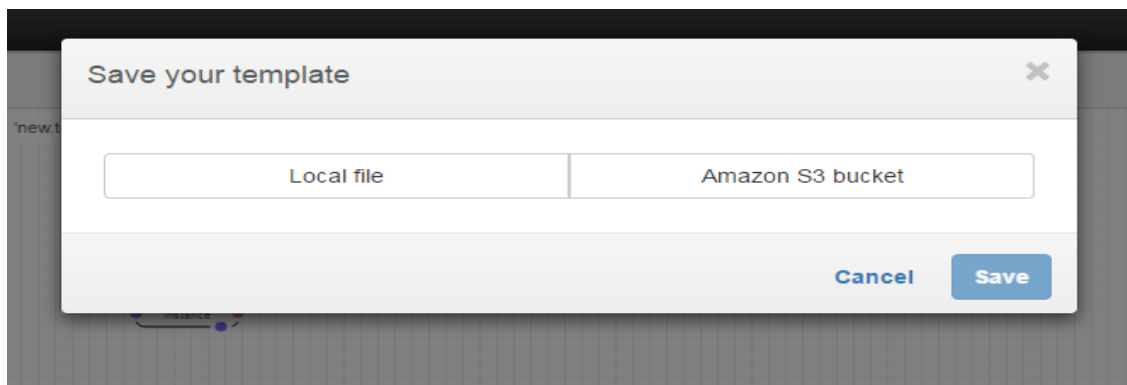


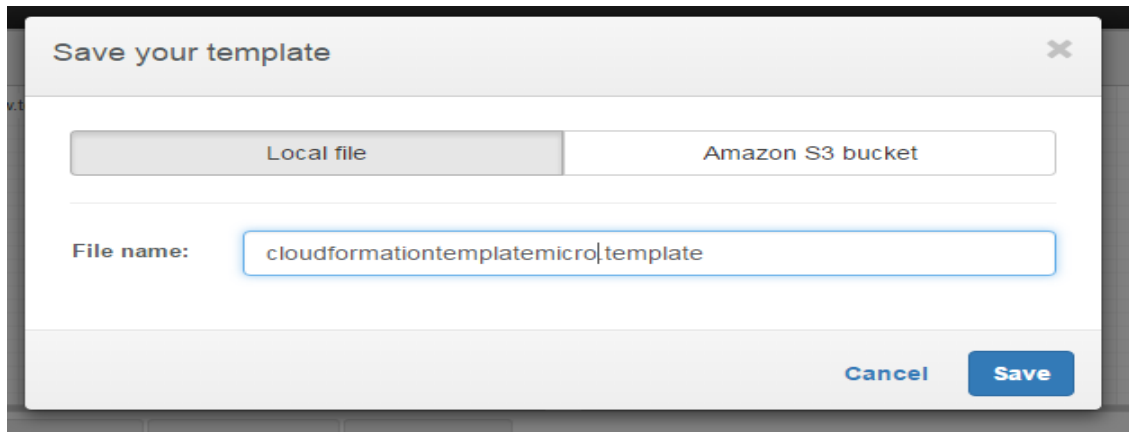
Paso 14

- Validar que el template sea valido



- Salvar el template como
 - o Cloudformationtemplatemicro





Paso 15

- Crear un **stack** y seleccionar el nuevo template
 - o **Cloudformationtemplatemicro**

CloudFormation > Stacks > Create stack

Step 1
Specify template

Step 2
Specify stack details

Step 3
Configure stack options

Step 4
Review

Create stack

Prerequisite - Prepare template

Prepare 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

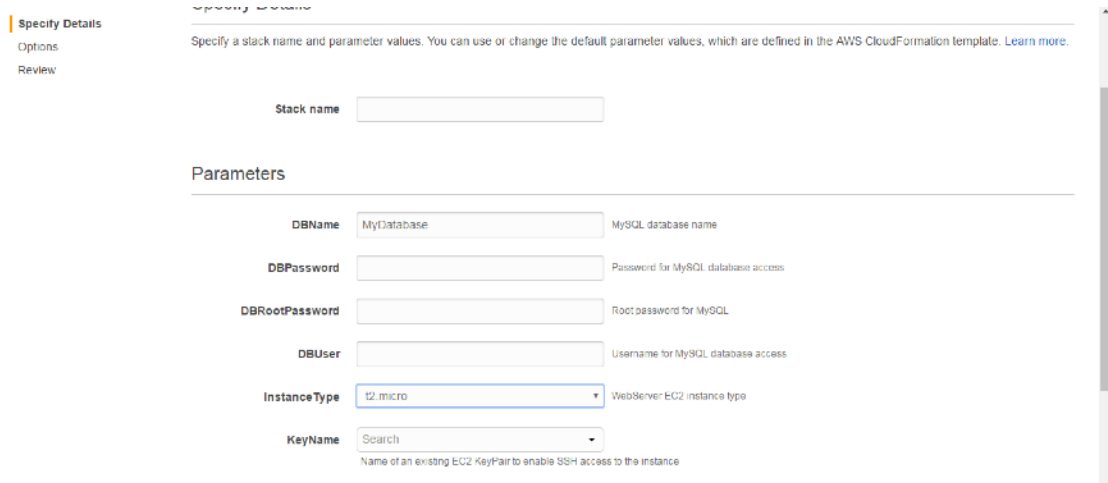
Upload a template file

Choose file  EC2_SG_2.template

JSON or YAML formatted file

Paso 16

- Verificar que el parámetro de **Instance Type** tengo el valor por default
 - T2.Micro



The screenshot shows the 'Specify Details' step of an AWS CloudFormation stack creation. The stack name is 'MyDatabase'. Under the 'Parameters' section, the following values are entered:

- DBName:** MyDatabase (MySQL database name)
- DBPassword:** (Password for MySQL database access)
- DBRootPassword:** (Root password for MySQL)
- DBUser:** (Username for MySQL database access)
- InstanceType:** t2.micro (WebServer EC2 instance type)
- KeyName:** Search (Name of an existing EC2 KeyPair to enable SSH access to the instance)

Paso 17

- Termine ambas EC2 creadas mediante la eliminación de los Stacks creados.