

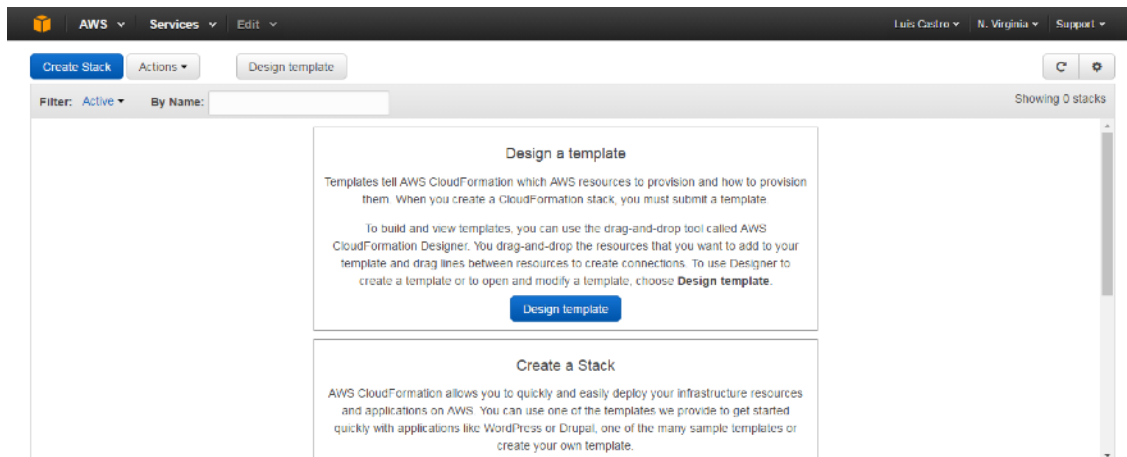
Paso 1

Acceder a la consola de AWS mediante el siguiente link:

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

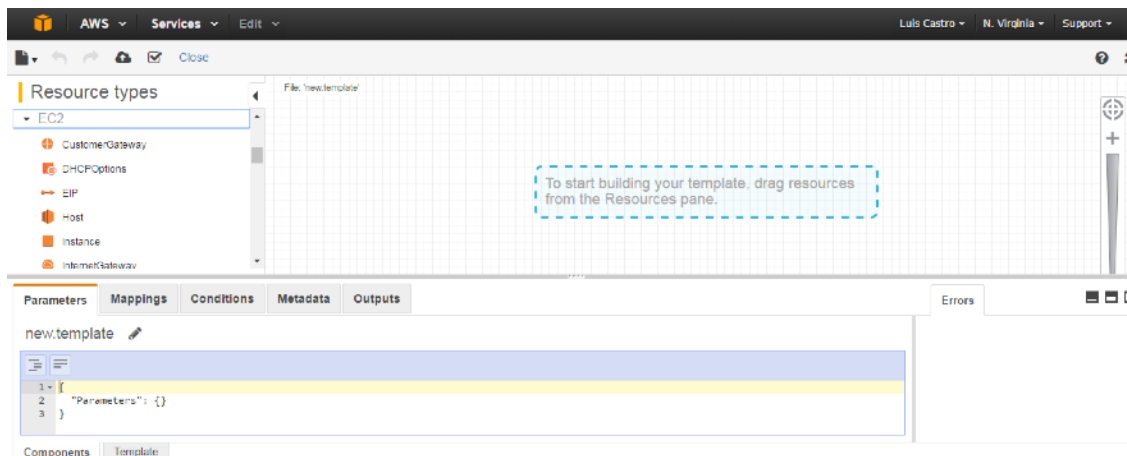
Paso 2

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

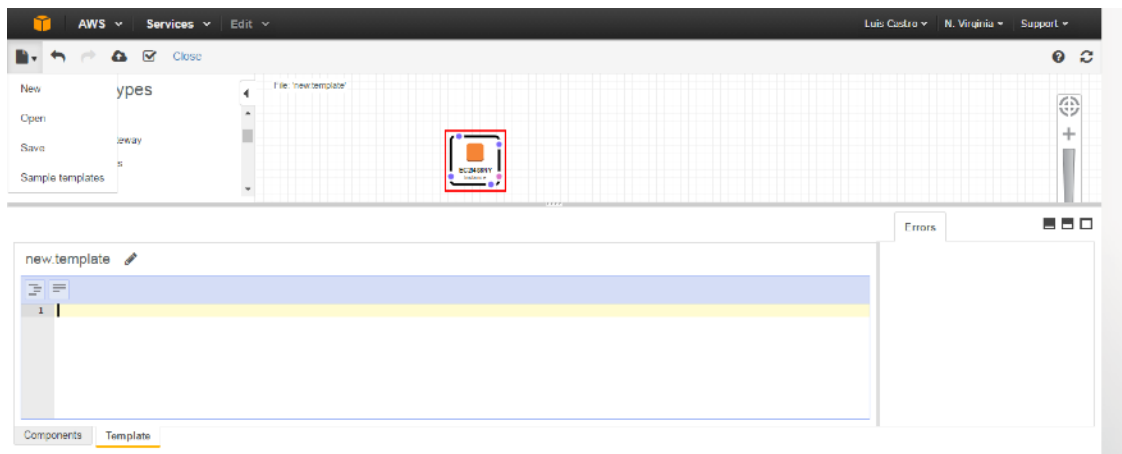


Paso 3

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

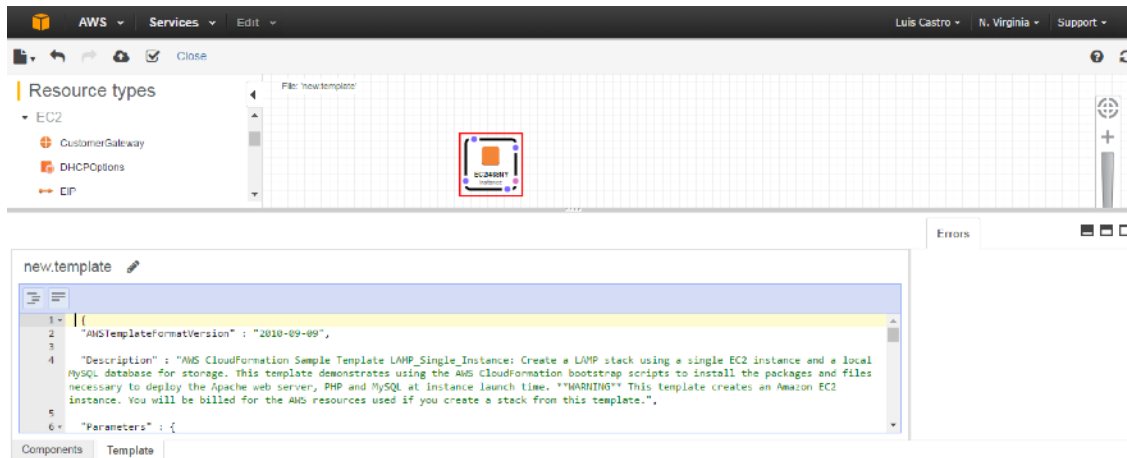


Paso 5

Del archivo enviado por correo utilice el llamado:

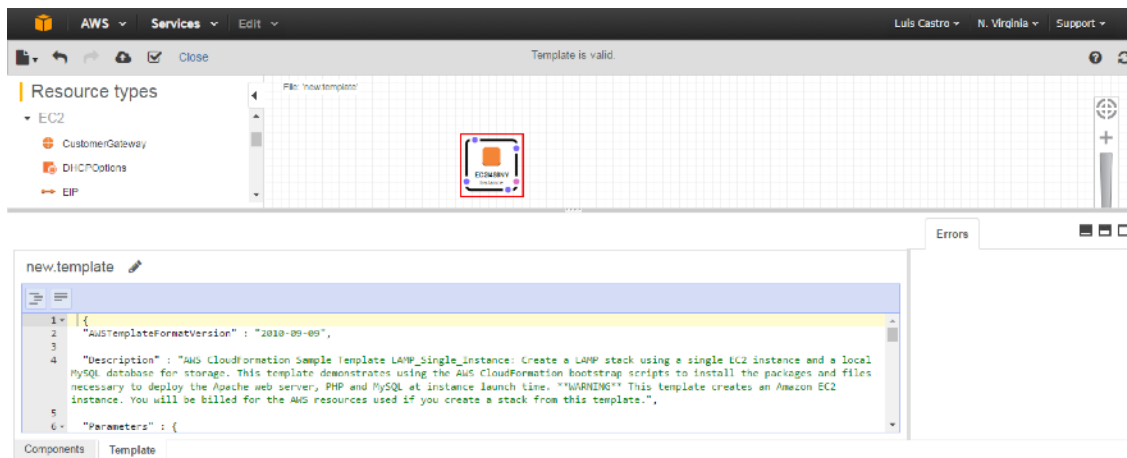
- EC2_SG.json

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



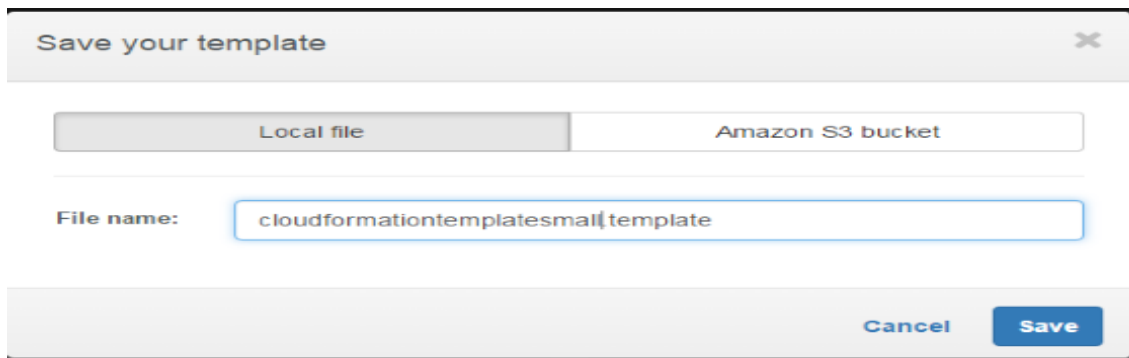
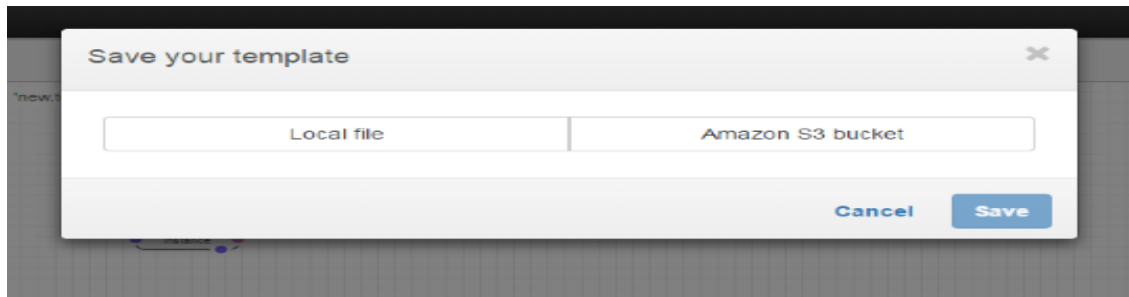
Paso 6

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”**



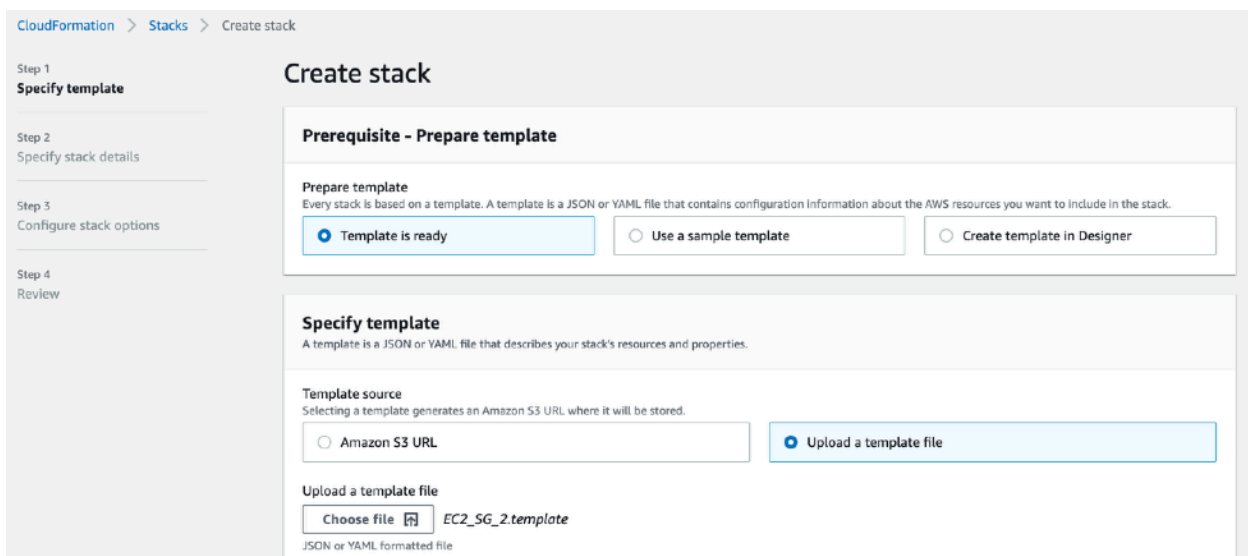
Paso 7

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**



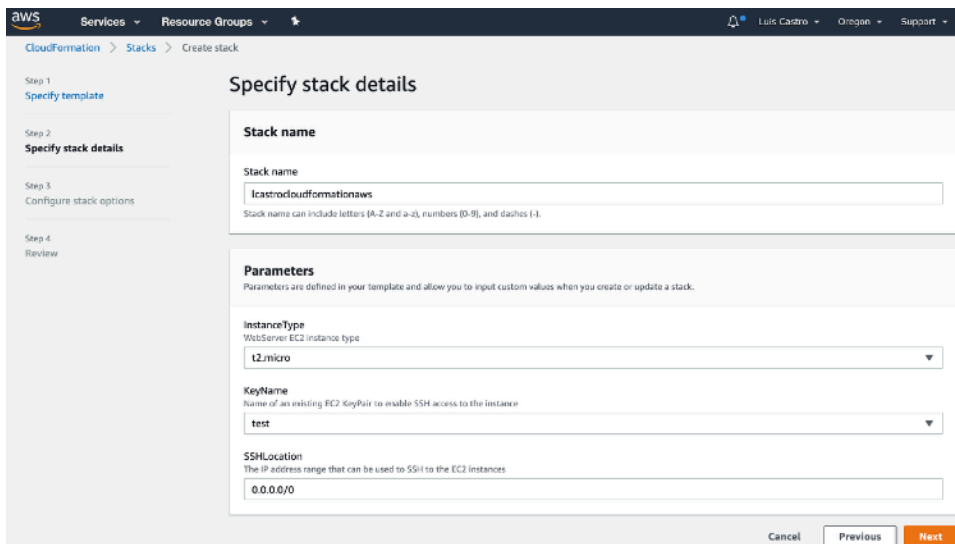
Paso 8

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

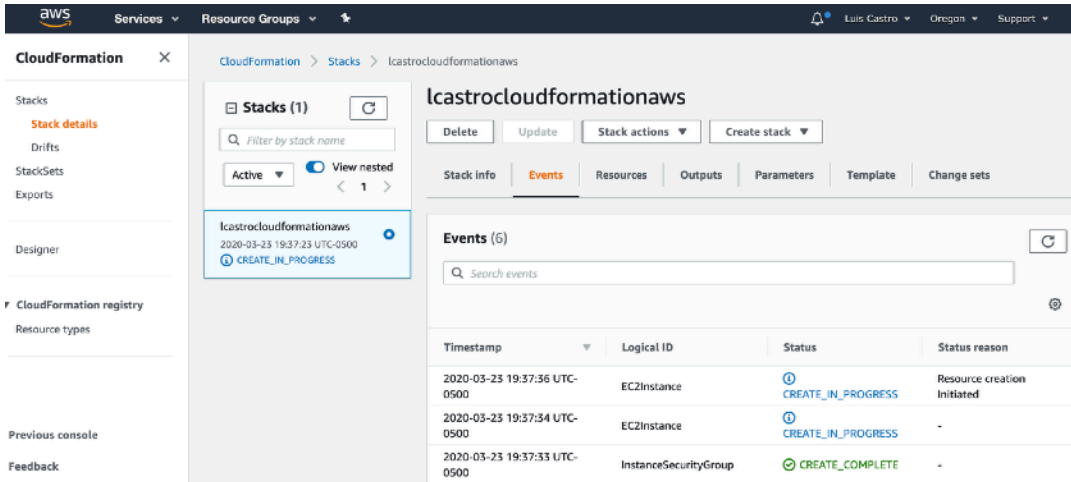


The screenshot shows the AWS CloudFormation console interface for creating a new stack. The breadcrumb navigation at the top indicates the path: CloudFormation > Stacks > Create stack. On the left, a sidebar shows the four steps of the process: Step 1: Specify template, Step 2: Specify stack details (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 (A-Z and a-z), numbers (0-9), and dashes (-); 'Parameters' with a dropdown for 'instanceType' set to 't2.micro' (labeled 'WebServer EC2 instance type') and another dropdown for 'KeyName' set to 'test' (labeled 'Name of an existing EC2 KeyPair to enable SSH access to the instance'); and 'SSHLocation' with a text input field containing '0.0.0.0/0' (labeled 'The IP address range that can be used to SSH to the EC2 instances'). At the bottom right, there are three buttons: 'Cancel', 'Previous', and 'Next'.

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

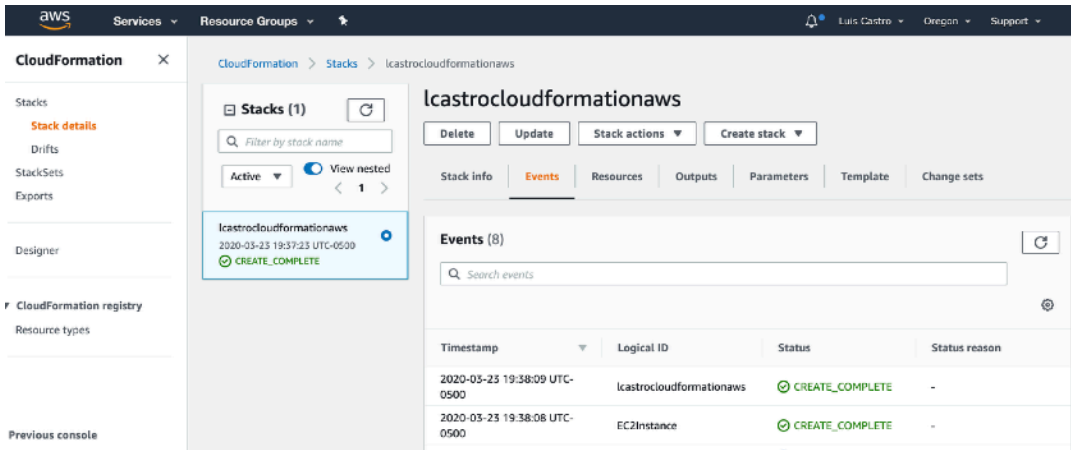
Paso 11

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



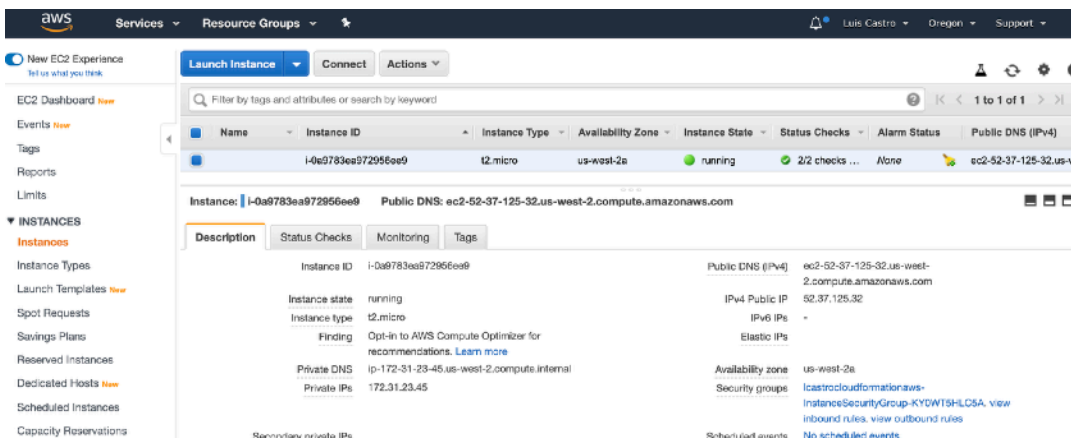
The screenshot shows the AWS CloudFormation console for the stack 'lcastrocloudformationaws'. The stack is in the 'CREATE_IN_PROGRESS' state. The 'Events' tab is selected, showing a list of events. The first event is 'Resource creation Initiated' for the 'EC2Instance' resource, which is in the 'CREATE_IN_PROGRESS'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

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...

Instance: **i-0a9783ea972956ee9** Public DNS: **ec2-52-37-125-32.us-west-2.compute.amazonaws.com**

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

Paso 12

- De los archivos enviado busque el archivo llamado:
 - **Cloudformationtemplatesmall**
- Verifique mediante Ctrl+f que el campo Default este de la siguiente forma
 - **“Default”: t2.micro**

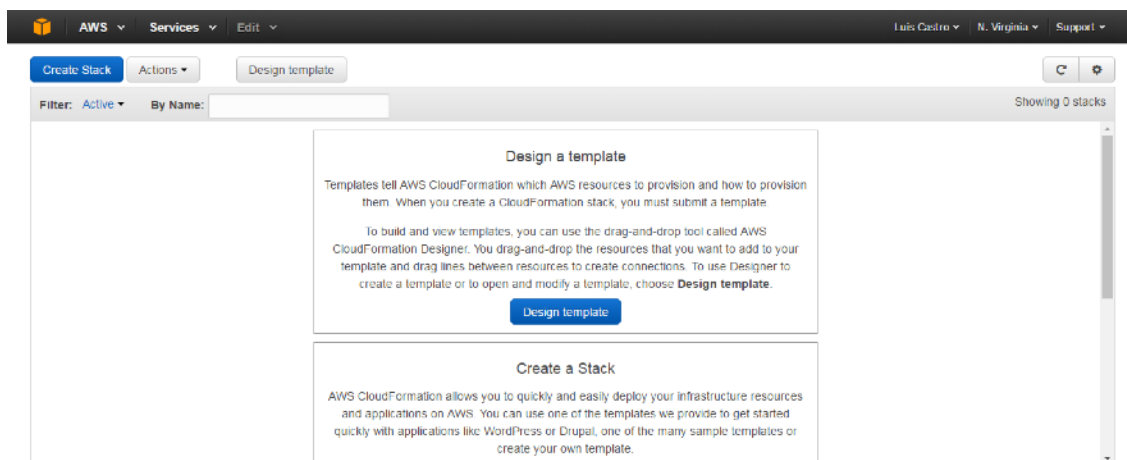
```
"Type": "String",
```

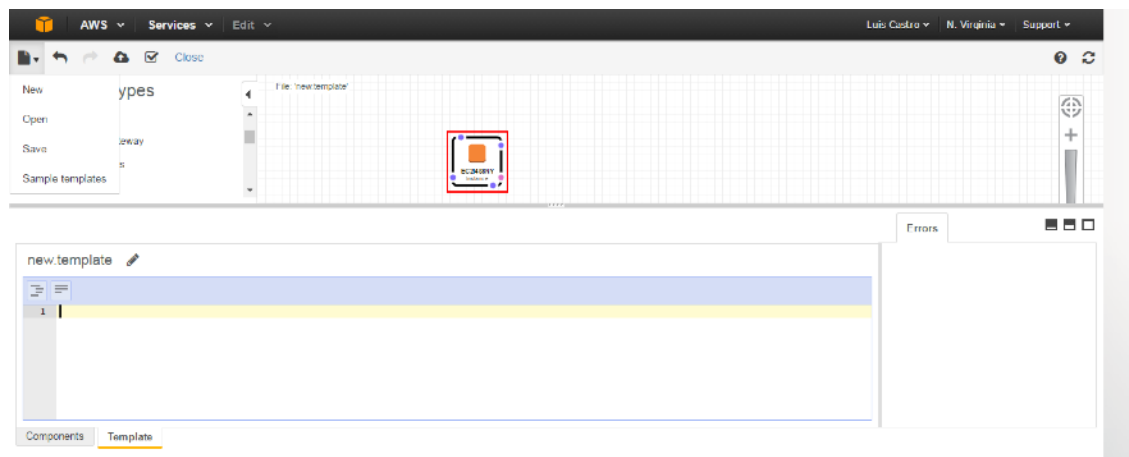
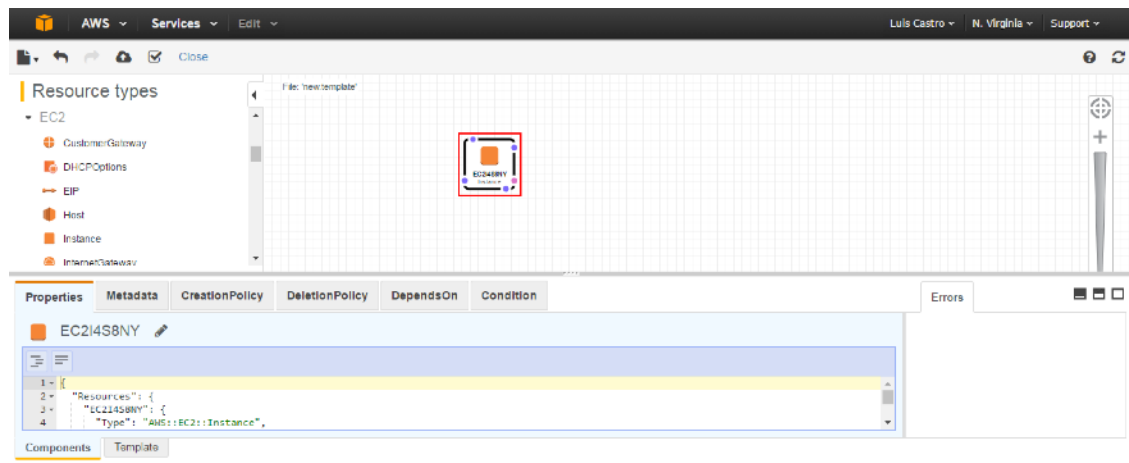
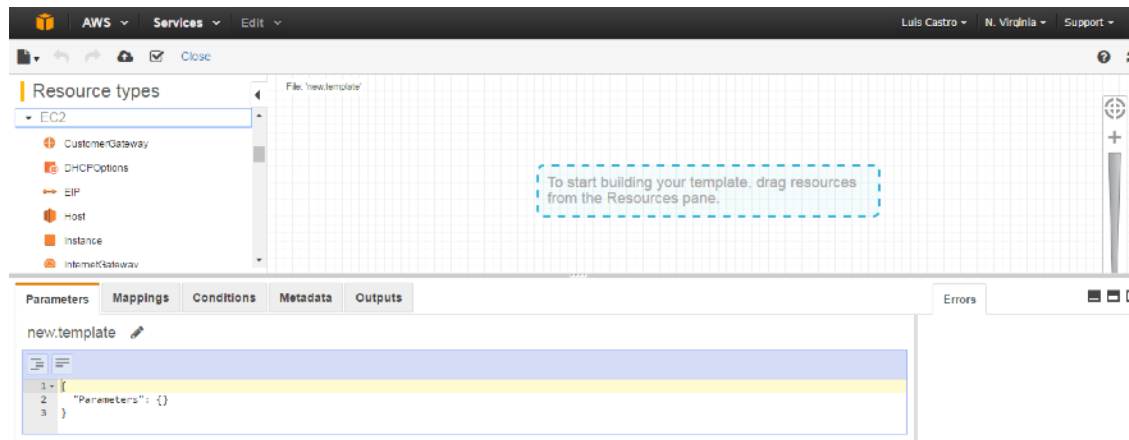
```
"Default": "t2.micro",
```

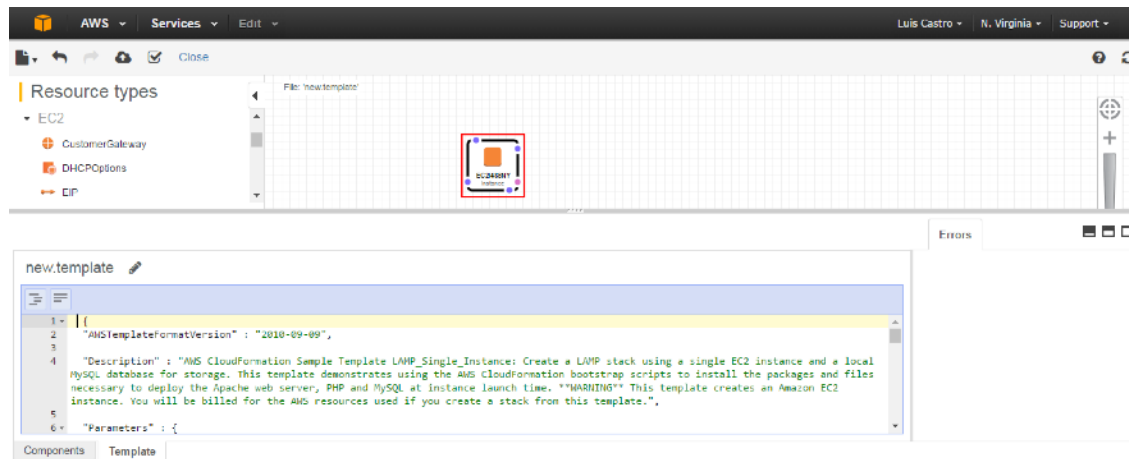
```
"AllowedValues": [ "t1.micro", "t2.nano", "t2.micro", "t2.small", "t2.medium", "t2.large",  
"m1.small", "m1.medium", "m1.large", "m1.xlarge", "m2.xlarge", "m2.2xlarge", "m2.4xlarge",  
"m3.medium", "m3.large", "m3.xlarge", "m3.2xlarge", "m4.large", "m4.xlarge", "m4.2xlarge",  
"m4.4xlarge", "m4.10xlarge", "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**

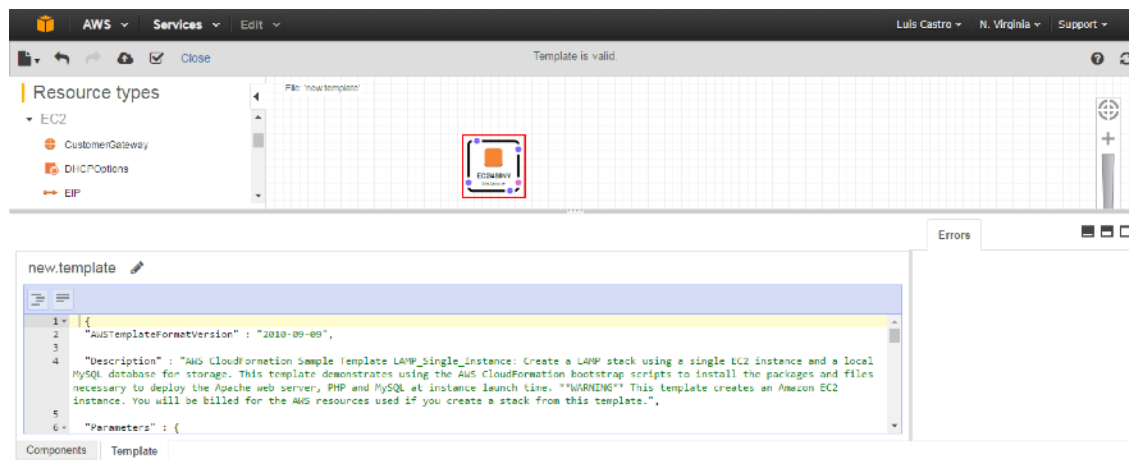




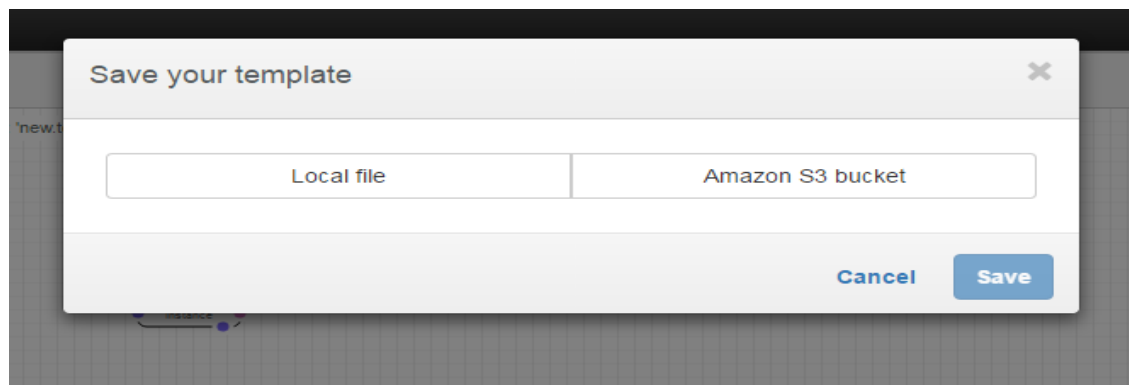


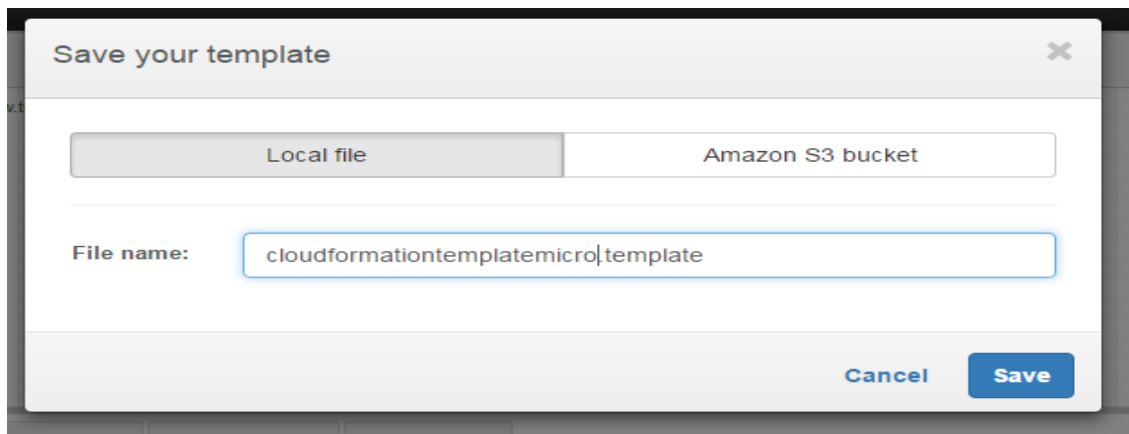
Paso 14

- 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**

Specify Details

Options

Review

Specify a stack name and parameter values. You can use or change the default parameter values, which are defined in the AWS CloudFormation template. [Learn more.](#)

Stack name

Parameters

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.