TRABAJO FINAL CURSO AWS

NOMBRE: ANDRE TICONA ROLLANO

PAIS: BOLIVIA

EMAIL: andre.ticona.r@gmail.com

1. CAPTURAS APLICACIÓN WEB

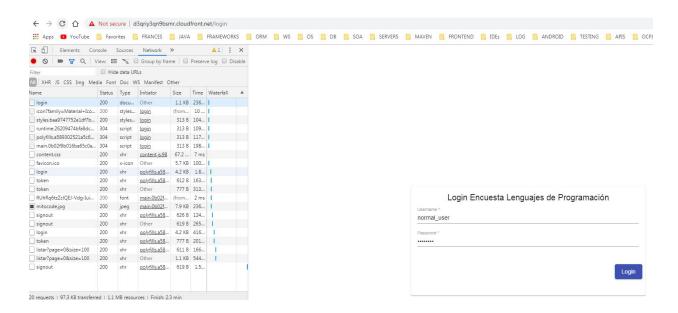Url Aplicación: http://d3qriy3qn9bsmr.cloudfront.net
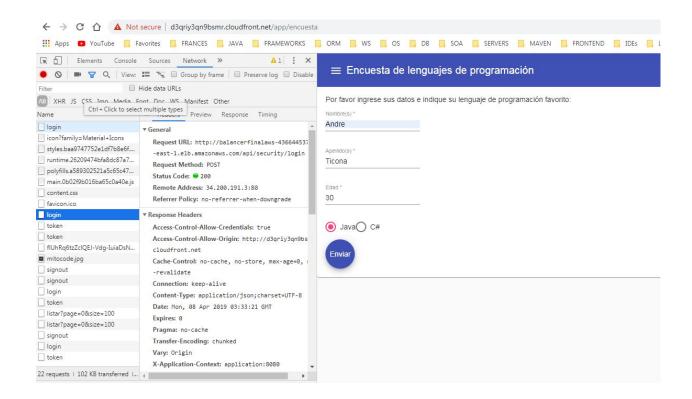Url Backend: http://balancerfinalaws-436644537.us-east-1.elb.amazonaws.com/
Github: https://github.com/andretr/encuesta-final-aws.git
Docker Hub: https://cloud.docker.com/u/andretr/repository/list
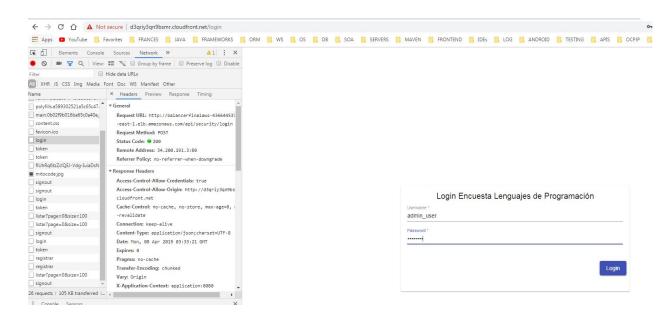
1.1. USUARIO REGULAR
Username: normal_user
Password: 12345678

1.2. USUARIO ADMIN
Username: admin_user
Password: 12345678

✕ Encuesta de lenguajes de programación

Ayúdanos con tus comentarios

aws

Buscar Registro

ID	Nombres	Apellidos	Edad	Lenguaje	Fecha	Acciones
1	Juan	Dominguez	20	Java	14/07/2018	✏
2	Marco	Mujia	15	C#	14/07/2018	✏
3	Lucia	Cortez	50	C#	14/07/2018	✏
4	John	Smith	22	Java	14/07/2018	✏
5	Andre	Ticona	30	Java	07/04/2019	✏

Mantenimiento ⌃

Resultados Enc...

Items por página 5 ▾   1 – 5 de 5

✕ Encuesta de lenguajes de programación

Formulario de Edición

ID
5

Nombre(s) *
Andre

Apellido(s) *
Ticona

Edad *
30

◯ Java ◉ C#

Enviar

✕ Encuesta de lenguajes de programación

Ayúdanos con tus comentarios

aws

Buscar Registro

ID	Nombres	Apellidos	Edad	Lenguaje	Fecha	Acciones
1	Juan	Dominguez	20	Java	14/07/2018	✏
2	Marco	Mujia	15	C#	14/07/2018	✏
3	Lucia	Cortez	50	C#	14/07/2018	✏
4	John	Smith	22	Java	14/07/2018	✏
5	Andre	Ticona	30	C#	07/04/2019	✏

Mantenimiento ⌃

Resultados Enc...

Items por página 5 ▾   1 – 5 de 5

2. VPC

Create VPC

A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You must specify an IPv4 address CIDR block larger than /16. You can optionally associate an Amazon-provided IPv6 CIDR block with the VPC.

Name tag	vpc-final-aws	ℹ
IPv4 CIDR block*	10.0.0.0/16	ℹ
IPv6 CIDR block	○ No IPv6 CIDR Block	ℹ
	○ Amazon provided IPv6 CIDR block	
Tenancy	Default ▾	ℹ

* Required

Edit DNS hostnames

VPC ID vpc-0e3f7db8a45457230

DNS hostnames ☑ enable

* Required   Cancel   Save

2.1.   SUBNETS

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag   final-publica1   ℹ

VPC*   vpc-0e3f7db8a45457230 ▾   ℹ

VPC CIDRs	CIDR	Status	Status Reason
	10.0.0.0/16	associated	

Availability Zone   us-east-1a ▾   ℹ

IPv4 CIDR block*   10.0.1.0/24   ℹ

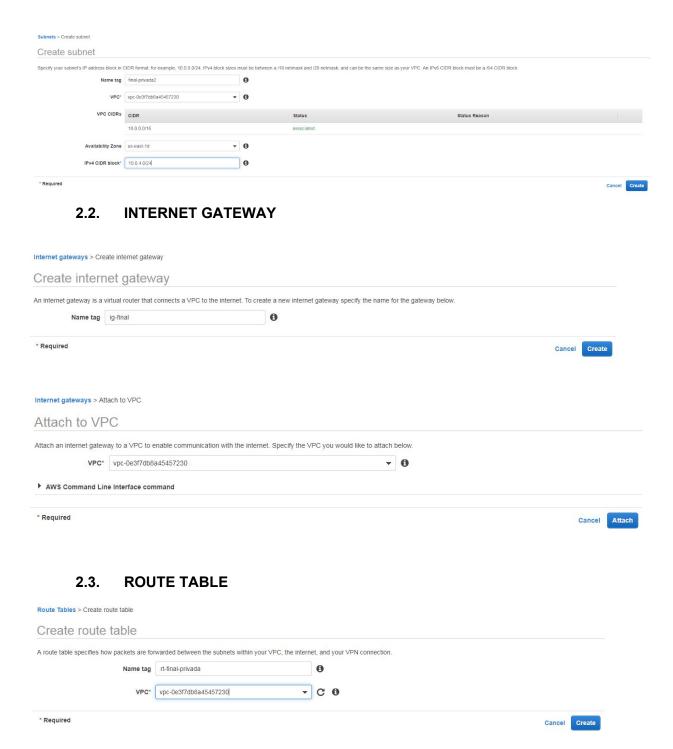* Required   Cancel   Create

Modify auto-assign IP settings

Enable the auto-assign IP address setting to automatically request a public IPv4 or IPv6 address for an instance launched in this subnet. You can override the auto-assign IP settings for an instance at launch time.

Subnet ID subnet-0a956708bc12fbf5b

Auto-assign IPv4 ☑ Enable auto-assign public IPv4 address ❶

* Required   Cancel **Save**

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag final-publica2 ❶

VPC* vpc-0e3f7db6a45457230 ▼ ❶

VPC CIDRs

CIDR	Status	Status Reason	
10.0.0.0/16	associated		

Availability Zone us-east-1b ▼ ❶

IPv4 CIDR block* 10.0.2.0/24 ❶

* Required   Cancel **Create**

Modify auto-assign IP settings

Enable the auto-assign IP address setting to automatically request a public IPv4 or IPv6 address for an instance launched in this subnet. You can override the auto-assign IP settings for an instance at launch time.

Subnet ID subnet-04f7fcbb74ed92dfc

Auto-assign IPv4 ☑ Enable auto-assign public IPv4 address ❶

* Required   Cancel **Save**

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

Name tag final-privada1 ❶

VPC* vpc-0e3f7db6a45457230 ▼ ❶

VPC CIDRs

CIDR	Status	Status Reason	
10.0.0.0/16	associated		

Availability Zone us-east-1c ▼ ❶

IPv4 CIDR block* 10.0.3.0/24 ❶

* Required   Cancel **Create**

Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.
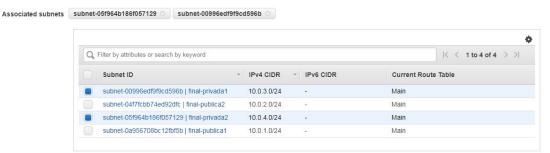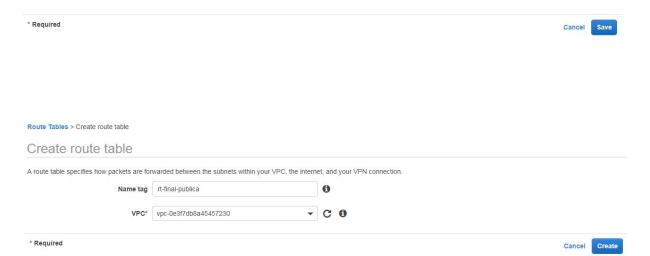
Name tag	final-privada2	ⓘ
VPC*	vpc-0e3f7db8a45457230 ▾	ⓘ

VPC CIDRs	CIDR	Status	Status Reason	
	10.0.0.0/16	associated		

Availability Zone	us-east-1d ▾	ⓘ
IPv4 CIDR block*	10.0.4.0/24	ⓘ

* Required   Cancel   **Create**

2.2.   INTERNET GATEWAY

Create internet gateway

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

Name tag	ig-final	ⓘ

* Required   Cancel   **Create**

Attach to VPC

Attach an internet gateway to a VPC to enable communication with the internet. Specify the VPC you would like to attach below.

VPC*	vpc-0e3f7db8a45457230 ▾	ⓘ

▶ AWS Command Line Interface command

* Required   Cancel   **Attach**

2.3.   ROUTE TABLE

Create route table

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Name tag	rt-final-privada	ⓘ
VPC*	vpc-0e3f7db8a45457230 ▾	⟳ ⓘ

* Required   Cancel   **Create**

Edit subnet associations

Route table rtb-063b2e10dbca9827a (rt-final-privada)

Associated subnets subnet-05f964b186f057129 ⊗   subnet-00996edf9f9cd596b ⊗

	Subnet ID	IPv4 CIDR	IPv6 CIDR	Current Route Table
☑	subnet-00996edf9f9cd596b	final-privada1	10.0.3.0/24	-	Main
☐	subnet-04f7fcbb74ed92dfc	final-publica2	10.0.2.0/24	-	Main
☑	subnet-05f964b186f057129	final-privada2	10.0.4.0/24	-	Main
☐	subnet-0a956708bc12fbf5b	final-publica1	10.0.1.0/24	-	Main

🔍 Filter by attributes or search by keyword |< < 1 to 4 of 4 > >|

* Required   Cancel   **Save**

Create route table

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Name tag   rt-final-publica   ⓘ

VPC*   vpc-0e3f7db8a45457230 ▾   C ⓘ

* Required   Cancel   **Create**

Edit subnet associations

Route table rtb-01d9066ea51fd2c86 (rt-final-publica)

Associated subnets subnet-0a956708bc12fbf5b ⊗   subnet-04f7fcbb74ed92dfc ⊗

	Subnet ID	IPv4 CIDR	IPv6 CIDR	Current Route Table
☐	subnet-00996edf9f9cd596b	final-privada1	10.0.3.0/24	-	rtb-063b2e10dbca9827a
☑	subnet-04f7fcbb74ed92dfc	final-publica2	10.0.2.0/24	-	Main
☐	subnet-05f964b186f057129	final-privada2	10.0.4.0/24	-	rtb-063b2e10dbca9827a
☑	subnet-0a956708bc12fbf5b	final-publica1	10.0.1.0/24	-	Main

🔍 Filter by attributes or search by keyword |< < 1 to 4 of 4 > >|

* Required   Cancel   **Save**

Edit routes

Destination	Target	Status	Propagated	
10.0.0.0/16	local	active	No	
0.0.0.0/0 ▼	igw-0f1274a59e329c7b4 ▼		No	⊗

Add route

* Required   Cancel   Save routes

3.   RDS

3.1.   SUBNET GROUP

RDS > Subnet groups > Create DB subnet group

Create DB subnet group

To create a new subnet group, give it a name and a description, and choose an existing VPC. You will then be able to add subnets related to that VPC.

Subnet group details

Name
You won't be able to modify the name after your subnet group has been created.

db-subnet-final

Must contain from 1 to 255 characters. Alphanumeric characters, spaces, hyphens, underscores, and periods are allowed.

Description

db-subnet-final

VPC
Choose a VPC identifier that corresponds to the subnets you want to use for your DB subnet group. You won't be able to choose a different VPC identifier after your subnet group has been created.

vpc-final-aws (vpc-0e3f7db8a45457230)   ▼

Add subnets

Add subnet(s) to this subnet group. You may add subnets one at a time below or add all the subnets related to this VPC. You may make additions/edits after this group is created. A minimum of 2 subnets is required.

Add all the subnets related to this VPC

Availability zone

Choose an availability zone ▼

Subnet

Choose a subnet ▼   Add subnet

Subnets in this subnet group (2)

Availability zone	Subnet ID	CIDR block	Action
us-east-1c	subnet-00996edf9f9cd596b	10.0.3.0/24	Remove
us-east-1d	subnet-05f964b186f057129	10.0.4.0/24	Remove

Cancel   Create

3.2.   DATABASE

Engine options

○ Amazon Aurora
Amazon Aurora

● MySQL

○ MariaDB

○ PostgreSQL

○ Oracle
ORACLE

○ Microsoft SQL Server
Microsoft SQL Server

MySQL

MySQL is the most popular open source database in the world. MySQL on RDS offers the rich features of the MySQL community edition with the flexibility to easily scale compute resources or storage capacity for your database.

- Supports database size up to 32 TiB.
- Supports General Purpose, Memory Optimized, and Burstable Performance instance classes.
- Supports automated backup and point-in-time recovery.
- Supports up to 5 Read Replicas per instance, within a single Region or cross-region.

ⓘ **Aurora global database feature is now available.**
This feature is now available in our new database creation flow.

Try it now

☑ Only enable options eligible for RDS Free Usage Tier Info

Cancel   Next

Settings

DB instance identifier   **Info**

Specify a name that is unique for all DB instances owned by your AWS account in the current region.

db-aws-final

DB instance identifier is case insensitive, but stored as all lower-case, as in "mydbinstance". Must contain from 1 to 63 alphanumeric characters or hyphens (1 to 15 for SQL Server). First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.

Master username   **Info**

Specify an alphanumeric string that defines the login ID for the master user.

root

Master Username must start with a letter. Must contain 1 to 16 alphanumeric characters.

Master password   **Info**

••••••••

Master Password must be at least eight characters long, as in "mypassword". Can be any printable ASCII character except "/", """, or "@".

Confirm password   **Info**

••••••••

Cancel   Previous   Next

Configure advanced settings

Network & Security

Virtual Private Cloud (VPC)   **Info**
VPC defines the virtual networking environment for this DB instance.

| vpc-final-aws (vpc-0e3f7db8a45457230) | ▼ |

Only VPCs with a corresponding DB subnet group are listed.

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

| db-subnet-final | ▼ |

Public accessibility   **Info**

○ 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 will be able to connect.

Availability zone   **Info**

| No preference | ▼ |

VPC security groups
Security groups have rules authorizing connections from all the EC2 instances and devices that need to access the DB instance.

● Create new VPC security group
○ Choose existing VPC security groups

Database options

Database name   **Info**

| encuesta |

Note: if no database name is specified then no initial MySQL database will be created on the DB Instance.

Port   **Info**
TCP/IP port the DB instance will use for application connections.

| 3306 |

DB parameter group   **Info**

| default.mysql5.6 | ▼ |

Option group   **Info**

| default:mysql-5-6 | ▼ |

IAM DB authentication   **Info**

○ Enable IAM DB authentication
  Manage your database user credentials through AWS IAM users and roles.

● Disable

4.   COGNITO

What do you want to name your user pool?

Give your user pool a descriptive name so you can easily identify it in the future.

Pool name

aws-final-pool|

How do you want to create your user pool?

Review defaults

Start by reviewing the defaults and then customize as desired

Step through settings

Step through each setting to make your choices

How do you want your end users to sign in?

You can choose to have users sign in with an email address, phone number, username or preferred username plus their password. Learn more.

◉ **Username** - Users can use a username and optionally multiple alternatives to sign up and sign in.
  ☐ Also allow sign in with verified email address
  ☐ Also allow sign in with verified phone number
  ☐ Also allow sign in with preferred username (a username that your users can change)

○ **Email address or phone number** - Users can use an email address or phone number as their "username" to sign up and sign in.
  ○ Allow email addresses
  ○ Allow phone numbers
  ○ Allow both email addresses and phone numbers (users can choose one)

Which standard attributes do you want to require?

All of the standard attributes can be used for user profiles, but the attributes you select will be required for sign up. You will not be able to change these requirements after the pool is created. If you select an attribute to be an alias, users will be able to sign-in using that value or their username. Learn more about attributes.

Required	Attribute	Required	Attribute
☐	address	☐	nickname
☐	birthdate	☐	phone number
☐	email	☐	picture
☐	family name	☐	preferred username
☐	gender	☐	profile
☐	given name	☐	zoneinfo
☐	locale	☐	updated at
☐	middle name	☐	website
☐	name		

Do you want to add custom attributes?

Enter the name and select the type and settings for custom attributes.

Add custom attribute

What password strength do you want to require?

Minimum length

8

- ☑ Require numbers
- ☐ Require special character
- ☐ Require uppercase letters
- ☐ Require lowercase letters

Amazon recommends requiring passwords with at least 8 characters, lowercase, uppercase, and numbers for greater security.

Do you want to allow users to sign themselves up?

You can choose to only allow administrators to create users or allow users to sign themselves up. Learn more.

- ⦿ Only allow administrators to create users
- ◯ Allow users to sign themselves up

How quickly should user accounts created by administrators expire if not used?

You can choose for how long until a user account created by an administrator expires if the account is not used.

Days to expire

30

Back   Next step

Do you want to enable Multi-Factor Authentication (MFA)?

Multi-Factor Authentication (MFA) increases security for your end users. If you choose 'optional', individual users can have MFA enabled. You can only choose 'required' when initially creating a user pool, and if you do, all users must use MFA. Phone numbers must be verified if MFA is enabled. You can configure adaptive authentication on the Advanced security tab to require MFA based on risk scoring of user sign in attempts. Learn more about multi-factor authentication.

Note: separate charges apply for sending text messages.

- ⦿ Off   ◯ Optional   ◯ Required

Which attributes do you want to verify?

Verification requires users to retrieve a code from their email or phone to confirm ownership. Verification of a phone or email is necessary to automatically confirm users and enable recovery from forgotten passwords. Learn more about email and phone verification.

- ⦿ Email   ◯ Phone number   ◯ Email or phone number   ◯ No verification

You must provide a role to allow Amazon Cognito to send SMS messages

Amazon Cognito needs your permission to send SMS messages to your users on your behalf. Learn more about IAM roles.

New role name

awsfinalpool-SMS-Role

Create role

Back   Next step

Which app clients will have access to this user pool?

The app clients that you add below will be given a unique ID and an optional secret key to access this user pool.

✕

frontend

App client id

4liqf08q9atrnnf2dtiiqnl8uc

Show Details

Add another app client   Return to pool details

You should only use localhost in the callback or logout URL for development and testing and not for production.

App client frontend

ID 4liqf08q9atrnnf2dtiiqnl8uc

Enabled Identity Providers   ☑ Select all

☑ Cognito User Pool

Sign in and sign out URLs

Enter your callback URLs below that you will include in your sign in and sign out requests. Each field can contain multiple URLs by entering a comma after each URL.

Callback URL(s)

http://localhost:8080/security

Sign out URL(s)

http://localhost:8080/security

OAuth 2.0

Select the OAuth flows and scopes enabled for this app. Learn more about flows and scopes.

Allowed OAuth Flows

☐ Authorization code grant   ☑ Implicit grant   ☐ Client credentials

Allowed OAuth Scopes

☐ phone   ☐ email   ☑ openid   ☐ aws.cognito.signin.user.admin   ☐ profile

Cancel   Save changes

Users   **Groups**

⟳

Create group

Group Name	Description	Precedence	Updated	Created
ADMIN	ROL_ADMIN	-	Apr 6, 2019 4:59:36 PM	Apr 6, 2019 4:59:36 PM
USER	ROL_USER	-	Apr 6, 2019 4:59:43 PM	Apr 6, 2019 4:59:43 PM

Username	Enabled	Account status	Email verified	Phone number verified	Updated	Created
admin_user	Enabled	CONFIRMED	true	-	Apr 6, 2019 10:08:57 PM	Apr 6, 2019 5:00:24 PM
normal_user	Enabled	CONFIRMED	true	-	Apr 6, 2019 10:09:25 PM	Apr 6, 2019 5:00:47 PM

5.   IAM

Users > final-aws-user

Summary

User ARN   arn:aws:iam::575887703753:user/final-aws-user

Path   /

Creation time   2019-03-31 23:19 AST

Permissions | Groups (1) | Tags | Security credentials | Access Advisor

▾ Permissions policies (2 policies applied)

Add permissions

Policy name ▾

Attached from group

▸   🟧 AmazonEC2ContainerRegistryFullAccess

▸   🟧 AmazonESCognitoAccess

▸ Permissions boundary (not set)

6.   EC2

Launch Instance ▾ | Connect | Actions ⌄

Q Filter by tags and attributes or search by keyword

1 to 6 of 6

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status		Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs
	BastionFinalAws	i-03a03573c59700f79	t2.micro	us-east-1b	🟢 running	✓ 2/2 checks ...	None		ec2-18-207-104-83.co...	18.207.104.83	-
■	ECS Instance - EC2ContainerService-clusterFinalAws	i-04e72a3a5f75f774c	t2.micro	us-east-1b	🟢 running	✓ 2/2 checks ...	None		ec2-18-204-247-10.co...	18.204.247.10	-
	BastionJaws02	i-00cf1640ad036b32c	t2.micro	us-east-1c	🔴 stopped		None		-	-	-
	ECS Instance - EC2ContainerService-clusterCursoJaws	i-06109f4831f69f90b	t2.micro	us-east-1c	🔴 terminated		None		-	-	-
	ECS Instance - EC2ContainerService-clusterCursoJaws	i-09001c77b4d3cbb1c	t2.micro	us-east-1e	🔴 terminated		None		-	-	-
	Autoscaling	i-092036504f25466bd	t2.micro	us-east-1c	🔴 terminated		None		-	-	-

Instance: ▌ i-04e72a3a5f75f774c (ECS Instance - EC2ContainerService-clusterFinalAws)   Public DNS: ec2-18-204-247-10.compute-1.amazonaws.com

Description | Status Checks | Monitoring | Tags

Instance ID   i-04e72a3a5f75f774c
Instance state   running
Instance type   t2.micro
Elastic IPs
Availability zone   us-east-1b
Security groups   EC2ContainerService-clusterFinalAws-EcsSecurityGroup-4UXCWHS484JY . view
                     inbound rules . view outbound rules
Scheduled events   No scheduled events
AMI ID   amzn-ami-2018.03.o-amazon-ecs-optimized (ami-0a6a36557ea3b9859)
Platform   -
IAM role   ecsInstanceRole
Key pair name   curso.jaws.01
Owner   575887703753
Launch time   April 7, 2019 at 8:58:59 PM UTC-4 (2 hours)
Termination protection False
Lifecycle   normal

Public DNS (IPv4)   ec2-18-204-247-10.compute-1.amazonaws.com
IPv4 Public IP   18.204.247.10
IPv6 IPs   -
Private DNS   ip-10-0-2-231.ec2.internal
Private IPs   10.0.2.231
Secondary private IPs
VPC ID   vpc-0e3f7db8a45457230
Subnet ID   subnet-04f7fcbb74ed92dfc
Network interfaces   eth0
Source/dest. check   True
T2/T3 Unlimited   Disabled
EBS-optimized   False
Root device type   ebs
Root device   /dev/xvda
Block devices   /dev/xvda
                     /dev/xvdcz

6.1.   LOAD BALANCER

1. Configure Load Balancer | 2. Configure Security Settings | 3. Configure Security Groups | 4. Configure Routing | 5. Register Targets | 6. Review

Step 1: Configure Load Balancer

Basic Configuration

To configure your load balancer, provide a name, select a scheme, specify one or more listeners, and select a network. The default configuration is an Internet-facing load balancer in the selected network with a listener that receives HTTP traffic on port 80.

Name ⓘ   balancerFinalAws

Scheme ⓘ   ⦿ internet-facing
               ○ internal

IP address type ⓘ   ipv4 ▾

Listeners

A listener is a process that checks for connection requests, using the protocol and port that you configured.

Load Balancer Protocol	Load Balancer Port	
HTTP ▾	80	✕

Add listener

Availability Zones

Specify the Availability Zones to enable for your load balancer. The load balancer routes traffic to the targets in these Availability Zones only. You can specify only one subnet per Availability Zone. You must specify subnets from at least two Availability Zones to increase the availability of your load balancer.

VPC ⓘ   vpc-0e3f7db8a45457230 (10.0.0.0/16) | vpc-final-aws ▾

Availability Zones   ☑ us-east-1a   subnet-0a956708bc12fbf5b (final-publica1) ▾
                        IPv4 address ⓘ   Assigned by AWS

                     ☑ us-east-1b   subnet-04f7fcbb74ed92dfc (final-publica2) ▾
                        IPv4 address ⓘ   Assigned by AWS

Cancel   Next: Configure Security Settings

Step 3: Configure Security Groups

A security group is a set of firewall rules that control the traffic to your load balancer. On this page, you can add rules to allow specific traffic to reach your load balancer. First, decide whether to create a new security group or select an existing one.

Assign a security group: ● Create a **new** security group
                             ○ Select an **existing** security group

Security group name: firewallBalancerFinalAws
Description: load-balancer-wizard-1 created on 2019-04-07T17:19:16.350-04:00

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	
Custom TCP ▼	TCP	80	Anywhere ▼	0.0.0.0/0, ::/0	✕

Add Rule

Create Load Balancer   **Actions ▼**

🔍 Filter by tags and attributes or search by keyword

	Name ▲	DNS name ▼	State ▼	VPC ID ▼	Availability Zones ▼	Type ▼	Created At ▼	Monitoring
☑	balancerFinalAws	balancerFinalAws-43664453...	active	vpc-0e3f7db8a45457230	us-east-1b, us-east-1a	application	April 7, 2019 at 5:35:29 PM ...	
☐	balancerJaws02	balancerJaws02-138644407...	active	vpc-0d0e8ee2b5b79b584	us-east-1e, us-east-1c	application	March 25, 2019 at 1:19:00 A...	

Load balancer: ▌ balancerFinalAws

Description   Listeners   Monitoring   Integrated services   Tags

Basic Configuration

Name   balancerFinalAws

ARN   arn:aws:elasticloadbalancing:us-east-1:575887703753:loadbalancer/app/balancerFinalAws/f9116f4029087018 📋

DNS name   balancerFinalAws-436644537.us-east-1.elb.amazonaws.com 📋
            (A Record)

State   active

Type   application

Scheme   internet-facing

IP address type   ipv4

        Edit IP address type

VPC   vpc-0e3f7db8a45457230 ⧉

Availability Zones   subnet-04f7fcbb74ed92dfc - us-east-1b ⧉
            IPv4 address: Assigned by AWS

            subnet-0a956708bc12fbf5b - us-east-1a ⧉
            IPv4 address: Assigned by AWS

        Edit availability zones

6.2.   Target Group

Create target group   **Actions** ▾

🔍 Filter by tags and attributes or search by keyword

	Name	▲	Port	▾	Protocol	▾	Target type	▾	Load Balancer	▾	VPC ID	▾	M
☐	nofoundFinalAws		80		HTTP		instance				vpc-0e3f7db8a45457230		
☐	notfound		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☐	routingMonoliticoJaws02		8080		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☑	tgSrvApiEncuesta		8080		HTTP		instance		balancerFinalAws		vpc-0e3f7db8a45457230		
☐	tgSrvApiFeedback		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☐	tgSrvApiNegocio		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☐	tgSrvApiNegocioSD		80		HTTP		ip		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☐	tgSrvApiSede		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☐	tgSrvApiSedeSD		80		HTTP		ip		balancerJaws02		vpc-0d0e8ee2b5b79b584		
☐	trgSrvApiSeguridad		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584		

Target group: ▌**tgSrvApiEncuesta**

Description	Targets	Health checks	Monitoring	Tags

Basic Configuration

Name ⓘ	tgSrvApiEncuesta
ARN ⓘ	arn:aws:elasticloadbalancing:us-east-1:575887703753:targetgroup/tgSrvApiEncuesta/ece850eb62de27f2 ⎘
Protocol ⓘ	HTTP
Port ⓘ	8080
Target type ⓘ	instance
VPC ⓘ	vpc-0e3f7db8a45457230
Load balancer ⓘ	balancerFinalAws

Create target group   **Actions** ▾

🔍 Filter by tags and attributes or search by keyword   I< < 1 to 10 of

	Name	▲	Port	▾	Protocol	▾	Target type	▾	Load Balancer	▾	VPC ID	▾	Monitoring	▾
☐	nofoundFinalAws		80		HTTP		instance				vpc-0e3f7db8a45457230			
☐	notfound		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☐	routingMonoliticoJaws02		8080		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☑	tgSrvApiEncuesta		8080		HTTP		instance		balancerFinalAws		vpc-0e3f7db8a45457230			
☐	tgSrvApiFeedback		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☐	tgSrvApiNegocio		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☐	tgSrvApiNegocioSD		80		HTTP		ip		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☐	tgSrvApiSede		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☐	tgSrvApiSedeSD		80		HTTP		ip		balancerJaws02		vpc-0d0e8ee2b5b79b584			
☐	trgSrvApiSeguridad		80		HTTP		instance		balancerJaws02		vpc-0d0e8ee2b5b79b584			

Target group: ▌**tgSrvApiEncuesta**

Description	**Targets**	Health checks	Monitoring	Tags

The load balancer starts routing requests to a newly registered target as soon as the registration process completes and the target passes the initial health checks. If demand on your targets increases, you can register additional targets. If demand on your t decreases, you can deregister targets.

Edit

Registered targets

Instance ID	Name	Port	Availability Zone	Status
i-04e72a3a5f75f774c	ECS Instance - EC2ContainerService-clusterFinalAws	32790	us-east-1b	healthy ⓘ
i-04e72a3a5f75f774c	ECS Instance - EC2ContainerService-clusterFinalAws	32793	us-east-1b	healthy ⓘ

7.   ECS

7.1.   CLUSTER

Select cluster template

The following cluster templates are available to simplify cluster creation. Additional configuration and integrations can be added later.

Networking only

Resources to be created:

Cluster

VPC (optional)

Subnets (optional)

Powered by AWS Fargate

EC2 Linux + Networking

Resources to be created:

Cluster

VPC

Subnets

Auto Scaling group with Linux AMI

EC2 Windows + Networking

Resources to be created:

Cluster

VPC

Subnets

Auto Scaling group with Windows AMI

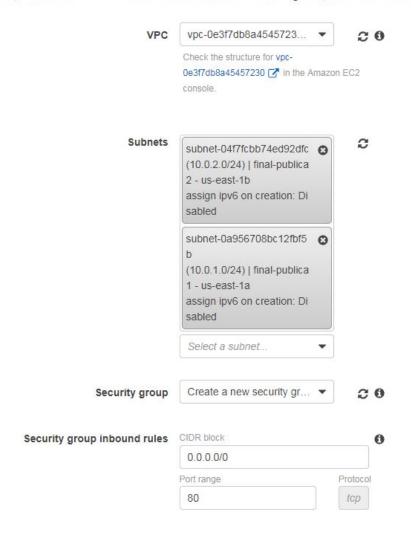*Required   Cancel   Next step

Configure cluster

Cluster name*   `clusterFinalAws`   ⓘ

     ☐ Create an empty cluster

Instance configuration

Provisioning Model   ● On-Demand Instance

With On-Demand Instances, you pay for compute capacity by the hour, with no long-term commitments or upfront payments.

     ○ Spot

Amazon EC2 Spot Instances allow you to bid on spare Amazon EC2 computing capacity for up to 90% off the On-Demand price. Learn more

EC2 instance type*   `t2.micro` ▼   ⓘ

     ☐ Manually enter desired instance type

Enable T2 unlimited   ☐   ⓘ

Number of instances*   `1`   ⓘ

EC2 Ami Id*   amzn-ami-2018.03.o-amazon-ecs-optimized [ami-0a6a36557ea3b9859]   ⓘ

EBS storage (GiB)*   `22`   ⓘ

Networking

Configure the VPC for your container instances to use. A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You can choose an existing VPC, or create a new one with this wizard.

VPC

vpc-0e3f7db8a4545723... ▼

Check the structure for vpc-0e3f7db8a45457230 ⬈ in the Amazon EC2 console.

Subnets

subnet-04f7fcbb74ed92dfc ⊗
(10.0.2.0/24) | final-publica
2 - us-east-1b
assign ipv6 on creation: Di
sabled

subnet-0a956708bc12fbf5 ⊗
b
(10.0.1.0/24) | final-publica
1 - us-east-1a
assign ipv6 on creation: Di
sabled

Select a subnet... ▼

Security group

Create a new security gr... ▼

Security group inbound rules

CIDR block

0.0.0.0/0

Port range

80

Protocol

tcp

Launch status

Your container instances are launching, and it may take a few minutes until they are in the running state and ready to access. Usage hours on your new container instances start immediately and continue

[Back] [**View Cluster**]

ECS status - 3 of 3 complete **clusterFinalAws**

✅ **ECS cluster**
ECS Cluster clusterFinalAws successfully created

✅ **ECS Instance IAM Policy**
IAM Policy for the role ecsInstanceRole successfully attached

✅ **CloudFormation Stack**
CloudFormation stack EC2ContainerService-clusterFinalAws and its resources successfully created

Cluster Resources

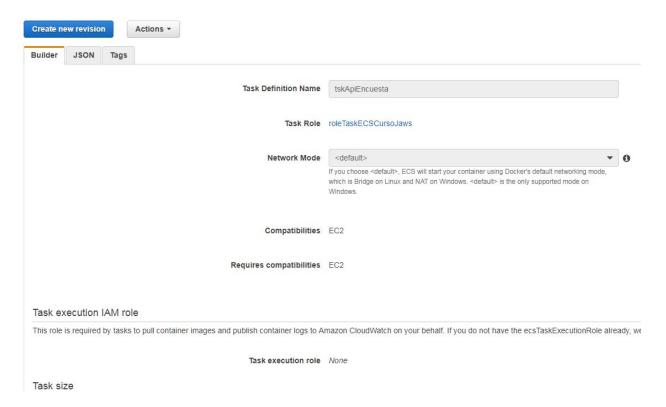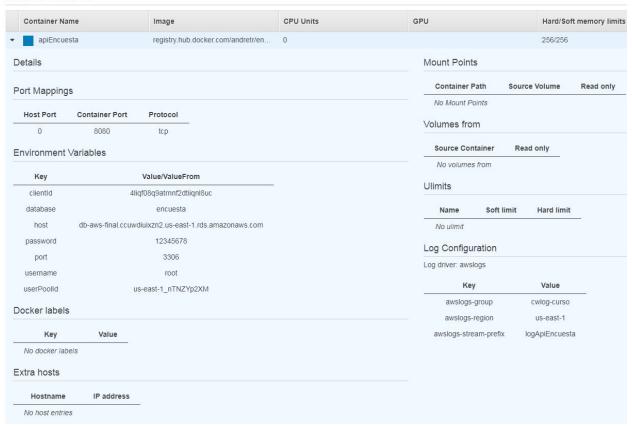|	
Instance type	t2.micro
Desired number of instances	1
Key pair	curso.jaws.01
ECS AMI ID	ami-0a6a36557ea3b9859
VPC	vpc-0e3f7db8a45457230
Subnets	subnet-04f7fcbb74ed92dfc, subnet-0a956708bc12fbf5b
VPC Availability Zones	us-east-1a, us-east-1b, us-east-1c, us-east-1d, us-east-1e, us-east-1f
Security group	sg-0acb7c97b43df4bfc
Launch configuration	EC2ContainerService-clusterFinalAws-EcsInstanceLc-YS4Q6BFVICW5
Auto Scaling group	EC2ContainerService-clusterFinalAws-EcsInstanceAsg-EHCAJMTMGQF1

7.2.   TASK DEFINITION
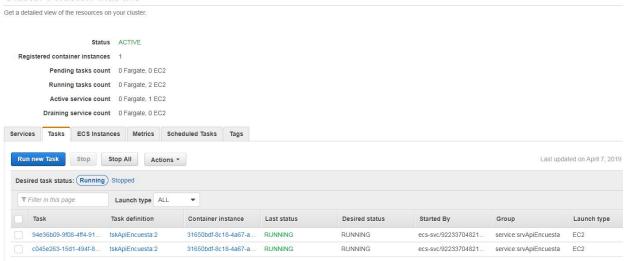
Task Definition: tskApiEncuesta:2

View detailed information for your task definition. To modify the task definition, you need to create a new revision and then make the required changes to the task definition

Create new revision   **Actions ▾**

Builder   **JSON**   **Tags**

Task Definition Name	tskApiEncuesta
Task Role	roleTaskECSCursoJaws
Network Mode	<default> ▾ ⓘ

If you choose <default>, ECS will start your container using Docker's default networking mode, which is Bridge on Linux and NAT on Windows. <default> is the only supported mode on Windows.

Compatibilities	EC2
Requires compatibilities	EC2

Task execution IAM role

This role is required by tasks to pull container images and publish container logs to Amazon CloudWatch on your behalf. If you do not have the ecsTaskExecutionRole already, we

Task execution role   *None*

Task size

Container Definitions

Container Name	Image	CPU Units	GPU	Hard/Soft memory limits
▼ ▪ apiEncuesta	registry.hub.docker.com/andretr/en...	0		256/256

Details

Port Mappings

Host Port	Container Port	Protocol
0	8080	tcp

Environment Variables

Key	Value/ValueFrom
clientId	4liqf08q9atrnnf2dtiiqnl8uc
database	encuesta
host	db-aws-final.ccuwdiuixzn2.us-east-1.rds.amazonaws.com
password	12345678
port	3306
username	root
userPoolId	us-east-1_nTNZYp2XM

Docker labels

Key	Value
No docker labels	

Extra hosts

Hostname	IP address
No host entries	

Mount Points

Container Path	Source Volume	Read only
No Mount Points		

Volumes from

Source Container	Read only
No volumes from	

Ulimits

Name	Soft limit	Hard limit
No ulimit		

Log Configuration

Log driver: awslogs

Key	Value
awslogs-group	cwlog-curso
awslogs-region	us-east-1
awslogs-stream-prefix	logApiEncuesta

Cluster : clusterFinalAws

Get a detailed view of the resources on your cluster.

Status	ACTIVE
Registered container instances	1
Pending tasks count	0 Fargate, 0 EC2
Running tasks count	0 Fargate, 2 EC2
Active service count	0 Fargate, 1 EC2
Draining service count	0 Fargate, 0 EC2

Services | **Tasks** | ECS Instances | Metrics | Scheduled Tasks | Tags

[Run new Task] [Stop] [Stop All] [Actions ▾]   Last updated on April 7, 2019

Desired task status: (Running) Stopped

| ☐ Filter in this page | **Launch type** ALL ▾ |

☐	Task	Task definition	Container instance	Last status	Desired status	Started By	Group	Launch type
☐	94e36b09-9f08-4ff4-91...	tskApiEncuesta:2	31650bdf-8c18-4a67-a...	RUNNING	RUNNING	ecs-svc/92233704821...	service:srvApiEncuesta	EC2
☐	c045e263-15d1-494f-8...	tskApiEncuesta:2	31650bdf-8c18-4a67-a...	RUNNING	RUNNING	ecs-svc/92233704821...	service:srvApiEncuesta	EC2

7.3.   Service

Create Service

Configure service

A service lets you specify how many copies of your task definition to run and maintain in a cluster. You can optionally use an Elastic Load Balancing load balancer to distribute incoming traffic to containers in your service. Amazon ECS maintains that number of tasks and coordinates task scheduling with the load balancer. You can also optionally use Service Auto Scaling to adjust the number of tasks in your service.

Launch type ○ FARGATE ● EC2 ⓘ

Task Definition
Family
tskApiEncuesta ▾ [Enter a value]

Revision
1 (latest) ▾

Cluster clusterFinalAws ▾ ⓘ

Service name srvApiEncuesta ⓘ

Service type* ● REPLICA ○ DAEMON ⓘ

Number of tasks 1 ⓘ

Minimum healthy percent 100 ⓘ

Maximum percent 200 ⓘ

Container to load balance

apiEncuesta : 8080

Remove ✕

Production listener port*   80:HTTP ▾   ⓘ

Production listener protocol*   HTTP

Target group name   create new ▾   tgApiEncuesta   ⓘ

Target group protocol   HTTP ▾

Target type   instance ⓘ

Path pattern   /api/encuesta*   **Evaluation order**   1

Path pattern: The first path pattern for a listener is the default path (/), which accepts all traffic that does not match another rule. You can later add additional patterns and priority values to this listener for other services.
Evaluation order: Rules are evaluated in priority order, from the lowest value to the highest value. Once a path pattern rule is matched, all other rules are ignored. You can route traffic from this listener to multiple services by creating a path for each service.

Existing paths in use on this listener

The path must include all the possible paths that your application uses, for example a service with the path /webapp1* will receive traffic sent to /webapp1 and /webapp1/page.html on this listener. We recommend choosing unique paths, and a lower evaluation order enables you to route traffic between multiple conflicting paths.

Evaluation Order	Rule Path	Target Group
default	/	tgEncuesta

Health check path   /status/verificar   ⓘ

Additional health check options can be configured in the ELB console after you create your service.

Launch Status

ECS Service status - 3 of 3 completed

Create Load Balancer

Target Group: tgApiEncuesta

✅ **Target Group created**
Target Group created. Waiting to create listener/rule. View: tgApiEncuesta

Rule: 80:HTTP /api/encuesta*:1

✅ **Rule created**
Rule created. Waiting to create service. View in load balancer: balancerFinalAws

Create Service

Create service: srvApiEncuesta

✅ **Service created**
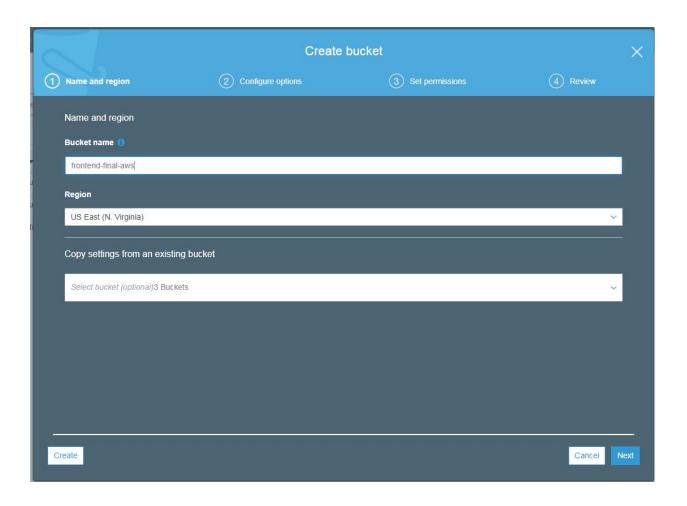**Service** created. Tasks will start momentarily. View: srvApiEncuesta

Additional integrations you can connect to your ECS service

Code Pipeline

Setup a CI/CD process from your service. You can build from source or have an ECR repository as the source for your deployment.

Create a pipeline ⧉

8.   S3

Create bucket

| (1) **Name and region** | (2) Configure options | (3) Set permissions | (4) Review |

Name and region

Bucket name ℹ

frontend-final-aws

Region

US East (N. Virginia) ⌄

Copy settings from an existing bucket

Select bucket (optional)3 Buckets ⌄

Create   Cancel   Next

Create bucket

✓ Name and region   ✓ Configure options   ③ **Set permissions**   ④ Review

Note: You can grant access to specific users after you create the bucket.

Public access settings for this bucket

Use the Amazon S3 block public access settings to enforce that buckets don't allow public access to data. You can also configure the Amazon S3 block public access settings at the account level. Learn more 🗗

Manage public access control lists (ACLs) for this bucket ⓘ

☐ Block new public ACLs and uploading public objects *(Recommended)* ⓘ

☐ Remove public access granted through public ACLs *(Recommended)* ⓘ

Manage public bucket policies for this bucket ⓘ

☐ Block new public bucket policies *(Recommended)* ⓘ

☐ Block public and cross-account access if bucket has public policies *(Recommended)* ⓘ

Manage system permissions

Do not grant Amazon S3 Log Delivery group write access to this bucket   ⌄

Previous   Next

Upload

1 Select files   2 Set permissions   3 Set properties   4 Review

9 Files   **Size:** 1.0 MB   **Target path:** frontend-final-aws

To upload a file larger than 80 GB, use the AWS CLI, AWS SDK, or Amazon S3 REST API. Learn more ⬈

➕ **Add more files**

📁 assets
2 Objects - 52.2 KB

📄 favicon.ico
- 5.3 KB

main.0b02f9b016ba65c0a40e.js
- 821.5 KB

polyfills.a589302521a5c65c4704.js
- 61.7 KB

runtime.26209474bfa8dc87a77c.js
- 1.4 KB

styles.baa9747752e1df7b8e6f.css
- 61.2 KB

Upload   Next

9.   CLOUDFRONT

Create Distribution

Origin Settings

Origin Domain Name	frontend-final-aws.s3.amazonaws.com	ℹ
Origin Path		ℹ
Origin ID	S3-frontend-final-aws	ℹ
Restrict Bucket Access	◉ Yes ○ No	ℹ
Origin Access Identity	◉ Create a New Identity ○ Use an Existing Identity	ℹ
Comment	access-identity-frontend-final-aws.s3.am	ℹ
Grant Read Permissions on Bucket	◉ Yes, Update Bucket Policy ○ No, I Will Update Permissions	ℹ

Origin Custom Headers   Header Name   Value   ℹ

⊕

Default Cache Behavior Settings

Path Pattern	Default (*)	ℹ
Viewer Protocol Policy	○ HTTP and HTTPS ◉ Redirect HTTP to HTTPS ○ HTTPS Only	ℹ
Allowed HTTP Methods	○ GET, HEAD ○ GET, HEAD, OPTIONS ◉ GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE	ℹ
Field-level Encryption Config	▾	ℹ
Cached HTTP Methods	GET, HEAD (Cached by default) ☑ OPTIONS	ℹ

Price Class	Use Only U.S., Canada and Europe ▾ ⓘ
AWS WAF Web ACL	None ▾ ⓘ
Alternate Domain Names (CNAMEs)	ⓘ

SSL Certificate ⦿ Default CloudFront Certificate (*.cloudfront.net)

Choose this option if you want your users to use HTTPS or HTTP to access your content with the CloudFro
https://d111111abcdef8.cloudfront.net/logo.jpg).
Important: If you choose this option, CloudFront requires that browsers or devices support TLSv1 or later to

○ Custom SSL Certificate (example.com):

Choose this option if you want your users to access your content by using an alternate domain name, such
You can use a certificate stored in AWS Certificate Manager (ACM) in the US East
(N. Virginia) Region, or you can use a certificate stored in IAM.

ⓘ

Request or Import a Certificate with ACM

Learn more about using custom SSL/TLS certificates with CloudFront.
Learn more about using ACM.

Supported HTTP Versions	⦿ HTTP/2, HTTP/1.1, HTTP/1.0 ⓘ ○ HTTP/1.1, HTTP/1.0
Default Root Object	/index.html ⓘ
Logging	○ On ⓘ ⦿ Off
Bucket for Logs	ⓘ
Log Prefix	ⓘ
Cookie Logging	○ On ⓘ ⦿ Off
Enable IPv6	☐ ⓘ

Custom Error Response Settings

HTTP Error Code	403: Forbidden ⌄
Error Caching Minimum TTL (seconds)	300
Customize Error Response	● Yes ○ No
Response Page Path	/index.html
HTTP Response Code	200: OK ⌄