



47°

Lab - AWS re/Start

Enrutamiento de conmutación por error de Route 53





Interactuando con Route 53

Los objetivos son:

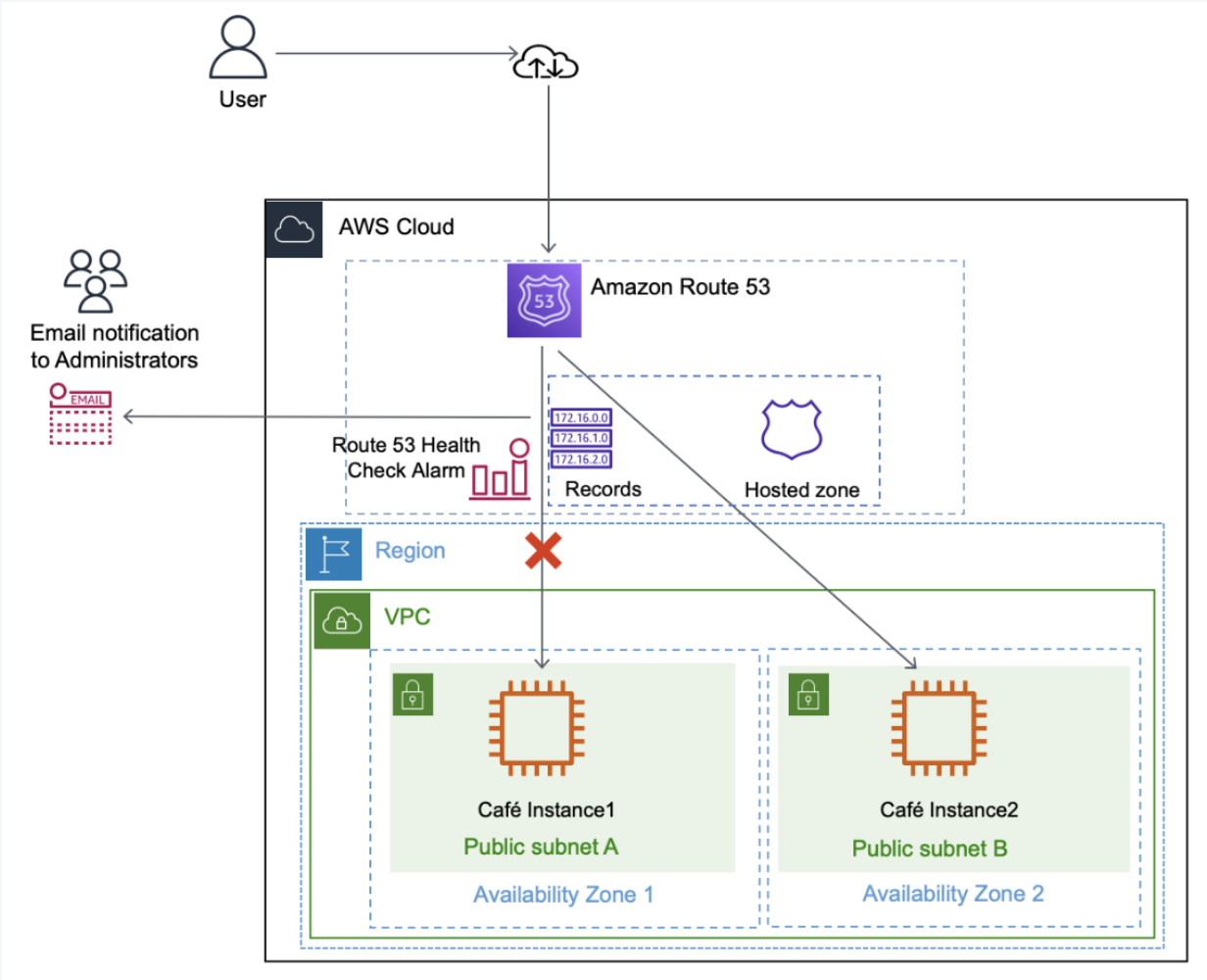
- Configurar un **health check de Route 53** que envíe correos electrónicos cuando el estado de un punto final HTTP no funcione correctamente.
- Configurar el **enrutamiento de conmutación por error** en Route 53.

Nota. Los registros Route 53 almacenan la dirección IP de la instancia EC2 en cada Zona de Disponibilidad. Las *solicitudes de los usuarios se envían normalmente a la dirección IP correspondiente a Café Instance 1 en la Zona de disponibilidad 1. Si la Instancia 1 no está disponible, las solicitudes se enrutan a la Instancia 2 en la AZ2 en función de la configuración de los registros de Route 53.*

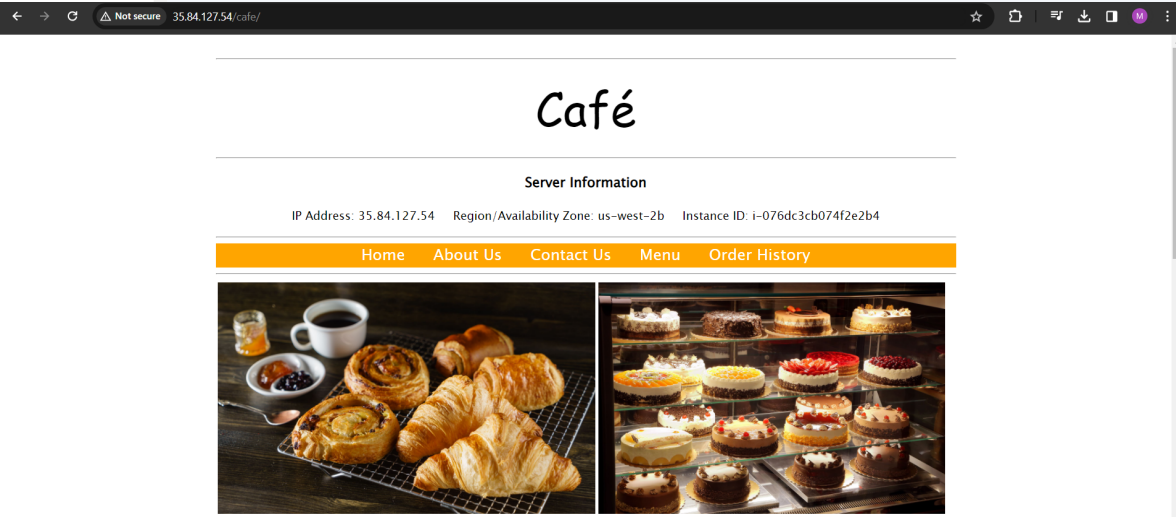
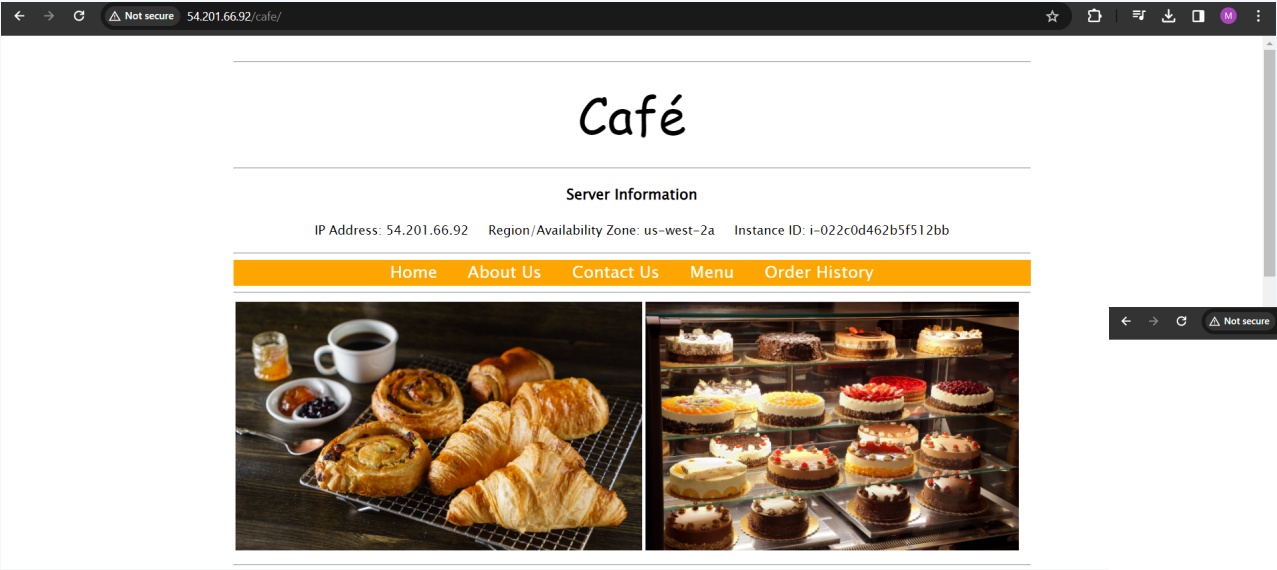
Tarea 01



Esta es la arquitectura final:



Empezamos verificando funcionamiento de ambas instancias



Tarea 01



Después de ello, procedemos a configurar el **Route 53 Health Check**:

Create health check

Step 1: Configure health check

Step 2: Get notified when health check fails

Configure health check

Route 53 health checks let you track the health status of your resources, such as web servers or mail servers, and take action when an outage occurs.

Name

What to monitor ☒ Endpoint
☐ Status of other health checks (calculated health check)
☐ State of CloudWatch alarm

Monitor an endpoint

Multiple Route 53 health checkers will try to establish a TCP connection with the following resource to determine whether it's healthy. [Learn more](#)

Specify endpoint by ☒ IP address ☐ Domain name

Protocol

IP address *

Host name

Port *

Path

Advanced configuration

URL

Health check type Basic + additional options: Fast Interval ([View Pricing](#))

* Required

Cancel

Next

Create health check

Step 1: Configure health check

Step 2: Get notified when health check fails

Get notified when health check fails

If you want CloudWatch to send you an Amazon SNS notification, such as an email, when the status of the health check changes to unhealthy, create an alarm and specify where to send notifications.

Create alarm ☒ Yes ☐ No

CloudWatch sends you an Amazon SNS notification whenever the status of this health check is unhealthy for at least one minute. The alarm will be located in the **us-east-1** region.

Send notification to ☐ Existing SNS topic ☒ New SNS topic

Topic name *

Recipient email addresses *

Separate multiple addresses with a comma, a semicolon, or a space

* Required

Cancel

Previous

Create health check

Route 53 comprueba ahora la salud de la instancia, solicitando periódicamente el nombre de dominio que ha proporcionado y verificando que devuelve una respuesta correcta. OJO: Debemos aceptar nuestra suscripción al mail



Simple Notification Service

Subscription confirmed!

You have successfully subscribed.

Your subscription's id is:

arn:aws:sns:us-east-1:730335501393:Primary-Website-Health:4c3046b1-adb4-486b-bfba-620fb76e5c07

If it was not your intention to subscribe, [click here to unsubscribe](#).



Tarea 01



Ahora, procedemos a configurar los *records* de Route 53. En este caso, configuraremos el enrutamiento como tolerancia a fallas. Esto para ambas instancias:

Create record

Quick create record

Record 1

Record name

www

.7442693_1709696577.vocareum.training

Record type

A – Routes traffic to an IPv4 address and some AWS resources

Alias

Value

54.201.66.92

TTL (seconds)

15

1m

1h

1d

Routing policy

Failover

Health check ID

390a5525-629a-4864-a3ed-d45e4c43af7c

Failover record type

Primary

Record ID

FailoverPrimary

Record 1

Record name

www

.7442693_1709696577.vocareum.training

Record type

A – Routes traffic to an IPv4 address and some AWS resources

Alias

Value

35.84.127.54

TTL (seconds)

15

1m

1h

1d

Routing policy

Failover

Health check ID - optional

Choose health check

Failover record type

Secondary

Record ID

FailoverSecondary

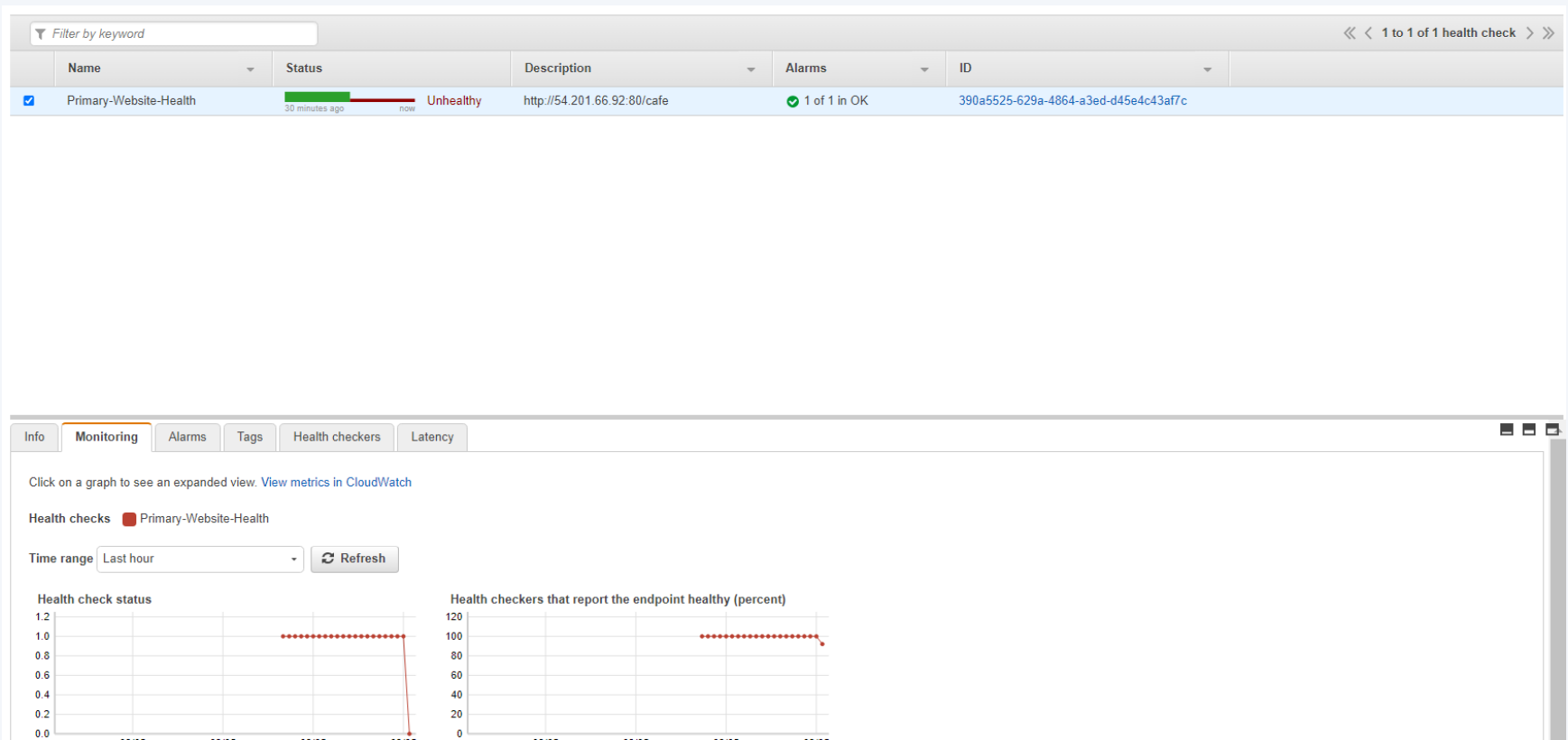
Verificamos que si la instancia 1 está en buen estado, Route 53 envíe nuestra solicitud hacia ella

SWIPE

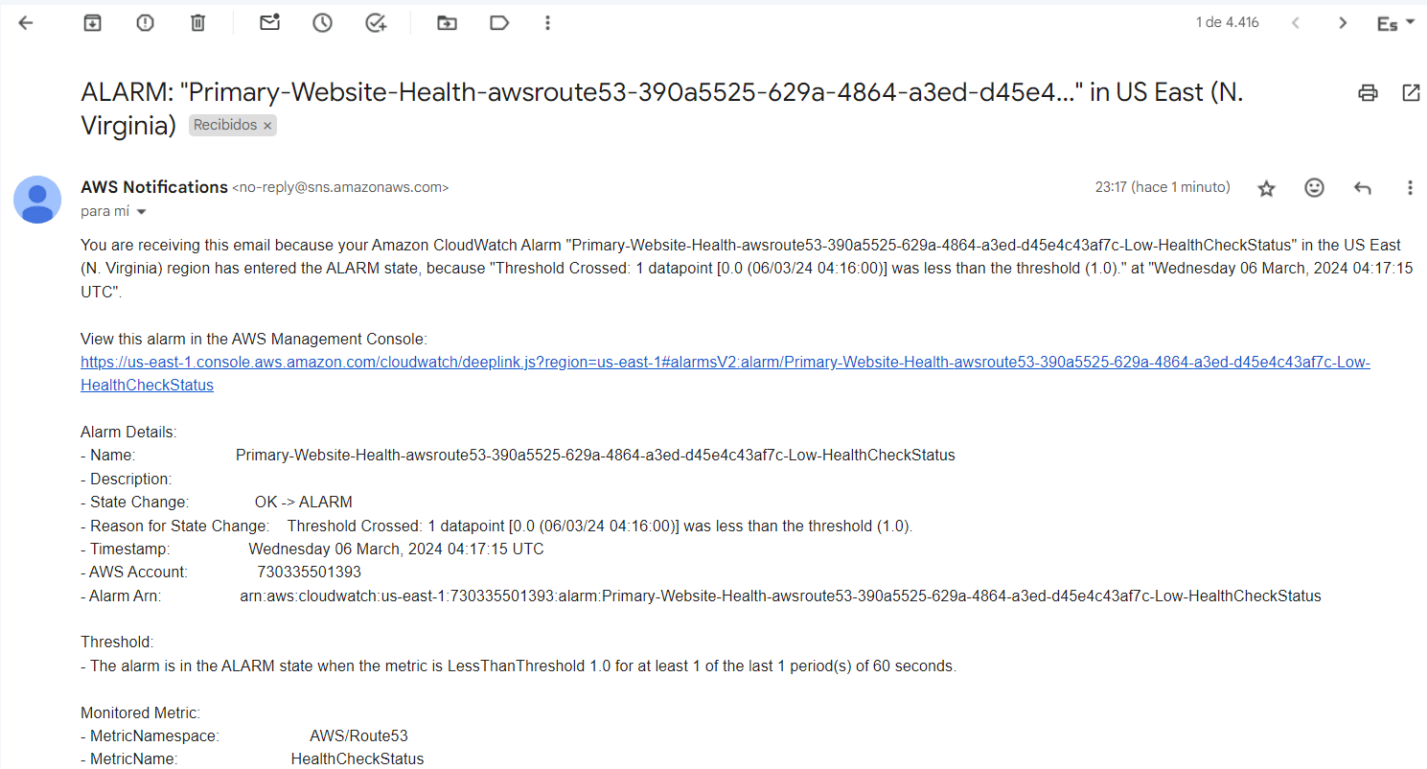
Tarea 01



Ahora debemos comprobar si este enrutamiento como respuesta a algún fallo en la instancia 1, envíe mis solicitudes hacia la instancia secundaria. Probamos deteniendo la instancia 1, y notamos que señala como unhealthy el website



También, recibimos la alarma por el correo



Tarea 01



Asimismo, notamos que al ir hacia el mismo dominio, el DNS Route 53 nos envía hacia la instancia secundaria, cuya dirección IP pública es 35.84.127.54

← → ↻ ⚠ Not secure 7442693_1709696577.vocareum.training/cafe/ ☆ 📄 📄 📄 M ⋮

Café

Server Information

IP Address: 35.84.127.54 Region/Availability Zone: us-west-2b Instance ID: i-076dc3cb074f2e2b4

Home About Us Contact Us Menu Order History

← → ↻ ⚠ Not secure 7442693_1709696577.vocareum.training/cafe/processOrder.php ☆ 📄 📄 📄 M ⋮

Café

Server Information

IP Address: 35.84.127.54 Region/Availability Zone: us-west-2b Instance ID: i-076dc3cb074f2e2b4

Home Menu Order History

Order Confirmation

Thank for your order! It will be available for pickup within 15 minutes. Your order number and details are shown below.

Order Number: 1 Date: 2024-03-05 Time: 23:20:59 Total Amount: \$47.00

Item	Price	Quantity	Amount
Croissant	\$1.50	4	\$6.00
Strawberry Blueberry Tart	\$3.50	4	\$14.00
Strawberry Tart	\$3.50	4	\$14.00
Hot Chocolate	\$3.00	2	\$6.00
Latte	\$3.50	2	\$7.00

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