

Sustentación: <https://youtu.be/LNMfcF4AwGQ>

Despliegue en Elastic Beanstalk (EB)

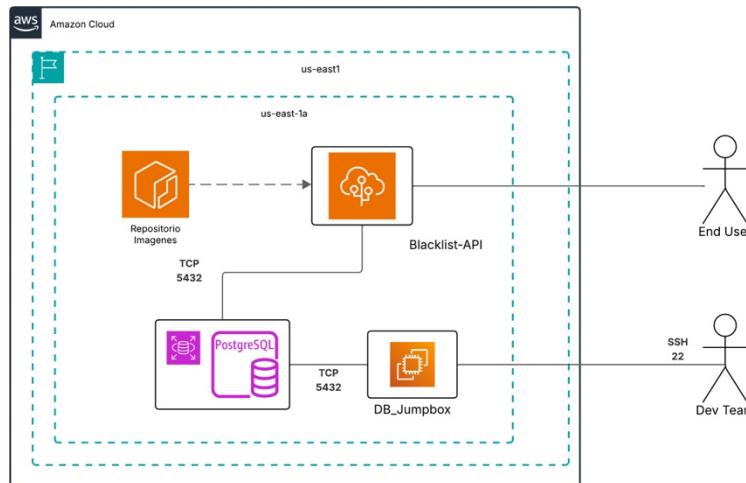


Ilustración 1. Diagrama de Contexto

Para el despliegue de la aplicación en AWS Elastic Beanstalk (EB), el equipo optó por utilizar una estrategia basada en contenedores, debido a las ventajas que ofrece en términos de escalabilidad y mantenimiento futuro. Como parte de este proceso, se realizó el aprovisionamiento de un repositorio en Amazon Elastic Container Registry (ECR), en donde se almacenaron las imágenes Docker de la aplicación.

Posteriormente, se configuró un rol en AWS Identity and Access Management (IAM) con los permisos necesarios para permitir que EB pudiera acceder al repositorio, leer las imágenes y realizar operaciones de pull.

Esta captura de pantalla muestra la configuración de un 'Instance Profile' llamado 'Instace_Profile_EC2_Beanstalk'. En la sección 'Summary', se detallan la fecha de creación (02/04/2025, 15:06 UTC-05:00), la actividad más reciente (14 minutos atrás) y la ARN (arn:aws:iam::501257812093:role/Instace_Profile_EC2_Beanstalk). La sección 'Permissions' muestra que el perfil tiene asociados cinco políticas de IAM: 'AmazonEC2ContainerRegistryPullOnly', 'AmazonEC2ContainerRegistryReadOnly', 'AWSElasticBeanstalkMulticontainerDocker', 'AWSElasticBeanstalkWebTier' y 'AWSElasticBeanstalkWorkerTier'. Los botones para 'Edit', 'Delete' y 'Add permissions' están disponibles en la parte superior derecha.

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Una vez creado este rol, procedimos con la creación de la aplicación de EB, con la siguiente configuración:

- Nombre de la aplicación: blacklist-api-dev
- Dominio: blacklist-api-stg-env
- Plataforma: Manejada, Docker corriendo en 64bit Amazon Linux

Blacklist-api-stg-env [Info](#) [Actions ▾](#) [Upload and deploy](#)

Environment overview		Platform	Change version
Health	OK	Platform	Docker running on 64bit Amazon Linux 2023/4.5.0
Domain	blacklist-api-stg-env.us-east-1.elasticbeanstalk.com	Application name	blacklist-api-dev
		Running version	app-e1e9-250406_004323706534
		Platform state	Supported

En la sección de “Service Access”, se agregó el rol de IAM que se creó anteriormente, y además creamos un EC2 Key Pair para poder entrar a las instancias EC2 creadas por EB para propósitos de debugging

Service access [Info](#) [Edit](#)

Configure the service role and EC2 instance profile that Elastic Beanstalk uses to manage your environment. Choose an EC2 key pair to securely log in to your EC2 instances.

Service role arn:aws:iam::501257812093:role/service-role/aws-elasticbeanstalk-service-role	EC2 key pair ec2_key	EC2 instance profile Instace_Profile_EC2_Beanstalk
---	-------------------------	---

Para la configuración de red, se hizo uso de la VPC que se tiene por defecto, y se restringió las AZ a dos, us-east-1a y us-east1b.

Virtual Private Cloud (VPC)

VPC

Launch your environment in a custom VPC instead of the default VPC. You can create a VPC and subnets in the VPC management console. [Learn more](#)

vpc-0b2179f84dc8abd4e | (172.31.0.0/16)

Create custom VPC

Instance settings

Choose a subnet in each AZ for the instances that run your application. To avoid exposing your instances to the Internet, run your instances in private subnets and load balancer in public subnets. To run your load balancer and instances in the same public subnets, assign public IP addresses to the instances. [Learn more](#)

Public IP address

Assign a public IP address to the Amazon EC2 instances in your environment.

Activated

Instance subnets

Availability Zone	Subnet	CIDR	Name
<input checked="" type="checkbox"/> us-east-1a	subnet-0680fe758a731c678	172.31.16.0/20	
<input type="checkbox"/> us-east-1e	subnet-07be3c988a9246f8d	172.31.48.0/20	
<input type="checkbox"/> us-east-1c	subnet-09d3c05cfa528d4f1	172.31.0.0/20	
<input type="checkbox"/> us-east-1f	subnet-0c12827189c5feacc	172.31.64.0/20	
<input checked="" type="checkbox"/> us-east-1b	subnet-0cc025cd030237a63	172.31.32.0/20	
<input type="checkbox"/> us-east-1d	subnet-0eb8bc7b5a8cfcc88e	172.31.80.0/20	

La BD fue creada directamente desde EB, configurando su disponibilidad en múltiples AZ y estableciendo su conexión a la aplicación. Para evitar costos adicionales, se

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verificaron previamente los tipos de instancias incluidas en el Free Tier de Amazon RDS, seleccionando la opción más adecuada. Se optó por delegar la creación de la BD a EB debido a que este servicio genera automáticamente los grupos de seguridad necesarios para RDS y EC2, aplicándolos directamente sin intervención manual.

Database Info
Integrate an RDS SQL database with your environment. [Learn more](#)

Database subnets
If your Elastic Beanstalk environment is attached to an Amazon RDS, choose subnets for your database instances. [Learn more](#)

Choose database subnets (6)

Availability Zone	Subnet	CIDR	Name
<input checked="" type="checkbox"/> us-east-1a	subnet-0680fe758a731c678	172.31.16.0/20	
<input type="checkbox"/> us-east-1e	subnet-07be3c988a9246f8d	172.31.48.0/20	
<input type="checkbox"/> us-east-1c	subnet-09d3c05cfa528d4f1	172.31.0.0/20	
<input type="checkbox"/> us-east-1f	subnet-0c12827189c5feacc	172.31.64.0/20	
<input checked="" type="checkbox"/> us-east-1b	subnet-0cc025cd030237a63	172.31.32.0/20	
<input type="checkbox"/> us-east-1d	subnet-0eb8bc7b5a8fcfc88e	172.31.80.0/20	

Database connection
Environment/database connection
Add a database to your environment or decouple an existing database from it.

Couple database
Elastic Beanstalk creates a database coupled to your environment. If you terminate an environment with a coupled database, the database lifecycle follows the deletion policy that you choose.

Decouple database
The database is decoupled from your environment. Decoupling a database doesn't affect the health of your environment. The database follows the deletion policy that you choose.

Database settings
Choose an engine and instance type for your environment's database.

Engine: postgres

Engine version: 15.8

Instance class: db.t3.micro

Storage
Choose a number between 5 GB and 1024 GB.
10 GB

Username: postgres

Password: *****

Availability: Low (one AZ)

Por la parte de grupos de seguridad, al momento de la creación solo se seleccionó el “default”, pero como se menciona anteriormente, EB crea y añade uno para garantizar

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la conexión a la BD:

Group name	Group ID	Name
awseb-e-s53t3dmc8-stack-AWSEBSecurityGroup-gWq7pTIZWftY	sg-0e787f799b9e8b4ca	Blacklist-api-stg-env
default	sg-02e265c5974901761	
ec2-rds-1	sg-030fcfd427ae7b184	
ec2-rds-2	sg-0bfe0b5ecdb865739	
launch-wizard-1	sg-06d501c81db4822fe	
launch-wizard-2	sg-00dd9a57ee23f018a	
rds-awseb-e-s53t3dmc8-stack-awsebrdsdbsecuritygroup-7bi0...	sg-03bc5104e49a3bb5c	
rds-ec2-1	sg-0acf338c5552aec23	
rds-ec2-2	sg-05b21b940ae466133	

En la sección de auto-escalamiento, se define primero como un ambiente de tipo de instancia única. Esto para primero garantizar el correcto funcionamiento de la aplicación antes de realizar las comparativas del modelo de despliegue.

▼ Capacity [Info](#)
Configure the compute capacity of your environment and auto scaling settings to optimize the number of instances used.

Auto scaling group

Environment type
Select a single-instance or load-balanced environment. You can develop and test an application in a single-instance environment to save costs and then upgrade to a load-balanced environment when the application is ready for production. [Learn more](#)

Single instance

Instances
1 Min
1 Max

Finalmente, se creó una instancia EC2 que tuviera conexión a la BD creada. Esta la denominamos “Jumpbox”, y nos sirve de intermediario a la BD, y nos permite realizar consultas y conectarnos mediante SSH a esta ya que la BD está configurada para no ser accesible públicamente. Esta conexión se realizó mediante las herramientas de conexión RDS:

Connected compute resources (1) [Info](#) Actions ▾

Connections to compute resources that were created automatically by RDS are shown here. Connections to compute resources that were created manually aren't shown.

Resource identifier	Resource type	Availability Zone	VPC security group	Compute resource security group	Connected proxy
i-03c096b33448a9347	EC2 instance	us-east-1a	rds-ec2-2	ec2-rds-2	-

Finalmente, cuando el ambiente despliega correctamente la aplicación de prueba, creamos el archivo `Dockerrun.aws.json` , donde especificamos de que imagen debe realizar el pull al ECR, que puerto va a quedar expuesto y finalmente cual va a ser el entrypoint para la imagen de Docker.

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```
Dockerrun.aws.json x
1  {
2      "AWSEBDockerrunVersion": "1",
3      "Image": {
4          "Name": "501257812093.dkr.ecr.us-east-1.amazonaws.com/devops/blacklist-api-python:latest",
5          "Update": "true"
6      },
7      "Ports": [
8          {
9              "ContainerPort": "8000"
10         }
11     ],
12     "Command": "/bin/sh -c \"set -a && . /app/.env.prod && exec python manage.py runserver-aws --port
13     |"
```

Seguido a esto, se ejecuta el comando “eb init”, se enlaza el ambiente de EB al directorio local, y procedemos con un “eb deploy”. Esto comprime los archivos necesarios en un .zip (En este caso, el Dockerrun.aws.json y el .env.prod), los envia a un bucket de S3, que después es descargado por la instancia de EC2 manejada por EB y ejecuta las instrucciones especificadas en el Dockerrun.aws.json.

Para validar el correcto funcionamiento de la aplicación, se cuenta con un endpoint de health que nos indica que la app está en funcionamiento:

The screenshot shows the Postman application interface. On the left, there's a sidebar with a tree view of the API structure. Under the 'DevOps Mail API' node, there are three methods: 'Blacklist Email' (POST), 'Get Email Status' (GET), and 'Health' (GET). The 'Health' method is selected. In the main panel, the URL is set to `http://{{API_URL}}/health`. A 'Query Params' table is visible, containing a single row with 'Key' and 'Value' columns. The 'Key' column has a dropdown menu with 'Collection' and 'Variables in request →'. The 'Value' column contains the placeholder `blacklist-api-stg-env.us-east-1.elasticbeanstalk.com`. Below the table, there are tabs for 'Body', 'Cookies', 'Headers (5)', and 'Test Results'. The 'Body' tab is active, showing a JSON response with three lines of code: '1 {', '2 | "message": "OK"', and '3 }'. At the bottom right of the main panel, there are status indicators: '200 OK', '327 ms', '170 B', and a globe icon. To the right of the main panel, there are buttons for 'Save Response' and other options.

Estrategias de Despliegue:

Configuración de health-checks y ambiente:

Con el objetivo de realizar una comparación adecuada, se establecieron las siguientes condiciones del entorno:

1. Todos los despliegues van a contar con 3 instancias

The screenshot shows the 'Capacity Info' section of the AWS Elastic Beanstalk console. It includes fields for setting the compute capacity and auto scaling settings to optimize the number of instances used. The 'Auto scaling group' section shows an 'Environment type' set to 'Load balanced'. The 'Instances' section has 'Min' set to 3 and 'Max' set to 6.

2. Para validar la corrección del despliegue, se verificará que haya un cambio en la aplicación y que ésta continúe cumpliendo con todos sus requerimientos funcionales, y que EB reporte un estado de salud OK.
3. Antes de comenzar cualquier prueba, se garantizará que la aplicación esté funcionando correctamente con la configuración predeterminada de un entorno con balanceo de carga ("Load Balanced"). Para esto fue necesario definir ciertas configuraciones para los health-checks. Nuestra API cuenta con un endpoint en la raíz que también sirve como health-check, coincidiendo así con la configuración predeterminada de Elastic Beanstalk (EB).

The screenshot shows the 'Processes' section of the AWS Elastic Beanstalk console. It lists environment processes, specifying the protocol and port that the load balancer uses to route requests to the process. A single process named 'default' is listed with port 80, protocol HTTP, and a health check path of '/'. The 'Stickiness' option is set to 'Disabled'.

4. Para medir los tiempos de despliegue, primero se modificará la configuración y posteriormente se creará una nueva versión de la aplicación. En este caso particular, solo se cambió la variable APP_VERSION a 0.1.0 dentro del archivo settings.py.

Rolling:

Es una política de despliegue que intenta evitar downtime y minimizar la disponibilidad reducida a costo de un tiempo de despliegue mayor. Este despliegue no

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requiere que se eliminen las instancias anteriores y se generen instancias nuevas. La configuración que se dejó para la prueba es la siguiente:

▼ Rolling updates and deployments [Info](#)

Application deployments

Choose how Amazon Elastic Beanstalk propagates source code changes and software configuration updates. [Learn more](#)

Deployment policy

Rolling

Batch size type

Percentage

Fixed

Deployment batch size

100

% instances at a time

Con esta configuración, el tiempo total para desplegar la aplicación y que los health-checks resultaran exitosos fue aproximadamente de 2 minutos y 50 segundos.

Time	Type	Details
April 6, 2025 17:03:17 (UTC-5)	INFO	Environment health has transitioned from Info to Ok. Application update completed 32 seconds ago and took 36 seconds.
April 6, 2025 17:02:17 (UTC-5)	INFO	Environment health has transitioned from Ok to Info. Application update in progress on 3 instances. 0 out of 3 instances completed (running for 29 seconds).
April 6, 2025 17:02:03 (UTC-5)	INFO	Environment update completed successfully.
April 6, 2025 17:02:03 (UTC-5)	INFO	New application version was deployed to running EC2 instances.
April 6, 2025 17:01:58 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:01:28 (UTC-5)	INFO	Deploying new version to instance(s).

Para mejorar la validación de resultados, se realizó adicionalmente un despliegue con un batch size del 50%, con el objetivo de observar las variaciones. Este despliegue tomó aproximadamente 4 minutos y 10 segundos.

Time	Type	Details
April 6, 2025 17:18:16 (UTC-5)	INFO	Environment health has transitioned from Info to Ok. Application update completed 57 seconds ago and took 3 minutes.
April 6, 2025 17:16:50 (UTC-5)	INFO	Environment update completed successfully.
April 6, 2025 17:16:50 (UTC-5)	INFO	New application version was deployed to running EC2 instances.
April 6, 2025 17:16:47 (UTC-5)	INFO	Batch 3: Completed application deployment.
April 6, 2025 17:16:42 (UTC-5)	INFO	Batch 3: Registering instance(s) with the load balancer and waiting for them to be healthy.
April 6, 2025 17:16:42 (UTC-5)	INFO	Command execution completed on 3 of 3 instances in environment.
April 6, 2025 17:16:41 (UTC-5)	INFO	Batch 3: Completed application deployment command execution.
April 6, 2025 17:16:38 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:16:15 (UTC-5)	INFO	Batch 3: Starting application deployment command execution.
April 6, 2025 17:15:53 (UTC-5)	INFO	Batch 3: Starting application deployment on instance(s) [i-058f522a7a52f722b].
April 6, 2025 17:15:53 (UTC-5)	INFO	Batch 2: Completed application deployment.
April 6, 2025 17:15:48 (UTC-5)	INFO	Batch 2: Registering instance(s) with the load balancer and waiting for them to be healthy.
April 6, 2025 17:15:47 (UTC-5)	INFO	Command execution completed on 2 of 3 instances in environment.
April 6, 2025 17:15:47 (UTC-5)	INFO	Batch 2: Completed application deployment command execution.
April 6, 2025 17:15:43 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:15:21 (UTC-5)	INFO	Batch 2: Starting application deployment command execution.
April 6, 2025 17:14:58 (UTC-5)	INFO	Batch 2: Starting application deployment on instance(s) [i-0c69964b0fd0a257b].
April 6, 2025 17:14:58 (UTC-5)	INFO	Batch 1: Completed application deployment.
April 6, 2025 17:14:53 (UTC-5)	INFO	Batch 1: Registering instance(s) with the load balancer and waiting for them to be healthy.
April 6, 2025 17:14:52 (UTC-5)	INFO	Command execution completed on 1 of 3 instances in environment.
Time	Type	Details
April 6, 2025 17:14:52 (UTC-5)	INFO	Batch 1: Completed application deployment command execution.
April 6, 2025 17:14:51 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:14:30 (UTC-5)	INFO	Batch 1: Starting application deployment command execution.
April 6, 2025 17:14:16 (UTC-5)	INFO	Environment health has transitioned from Ok to Info. Application update in progress on 1 instance. 0 out of 3 instances completed (running for 3 seconds).
April 6, 2025 17:14:07 (UTC-5)	INFO	Batch 1: Starting application deployment on instance(s) [i-0a2f6d99640134e62].
April 6, 2025 17:14:06 (UTC-5)	INFO	Deploying new version to instance(s).

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Estos resultados evidencian que un despliegue con batch size del 100% es muy similar a un despliegue del tipo "All at once", y que el tiempo de despliegue es inversamente proporcional al tamaño del batch; cuanto menor sea el tamaño del batch, mayor será el número de particiones y estas serán desplegadas secuencialmente.

Rolling with additional batch

Este método sigue la misma metodología que un despliegue Rolling, pero además despliega un batch adicional de instancias para evitar completamente la reducción de disponibilidad. Para estas pruebas se configuró de la siguiente manera:

▼ Rolling updates and deployments [Info](#)

Application deployments

Choose how Amazon Elastic Beanstalk propagates source code changes and software configuration updates. [Learn more](#) 

Deployment policy

Rolling with additional batch

Batch size type

- Percentage
 Fixed

Deployment batch size

50

% instances at a time

Durante el despliegue se verifico efectivamente que se tiene un numero de instancias adicionales equivalentes al tamaño del batch

Enhanced instance health (4) [Info](#)

	Instance ID	Status	Running time	Deploys
▼ Ok				
<input type="radio"/>	i-01e87f7df25...	Ok	• Checking instance health (running for 25 seconds). • Application deployment completed 25 seconds ago and took 73 seconds.	3 minutes 6
<input type="radio"/>	i-0c69964b0f...	Ok		2 hours 5
<input type="radio"/>	i-0a2f6d9964...	Ok		2 hours 5
<input type="radio"/>	i-058f522a7a...	Ok		2 hours 5

En términos de tiempo de despliegue, se tiene un aproximado de 7min y 12 segundos. El aumento lo podemos ver gracias a que durante el despliegue se tienen que hacer actividades como el manejo del ciclo de vida de las instancias adicionales, además de

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que solo se concluyó el despliegue hasta que el warning que se ven en los eventos desapareció y el ambiente paso de estado degradado a OK.

April 6, 2025 17:42:13 (UTC-5)	INFO	Removed instance [i-0c69964b0fd0a257b] from your environment.
April 6, 2025 17:41:14 (UTC-5)	WARN	Environment health has transitioned from Info to Degraded. Incorrect application version found on 1 out of 4 instances. Expected version "app-7ae2-250406_173459615916" (deployment 6). ELB processes are not healthy on 1 out of 4 instances. Application update completed 11 seconds ago and took 5 minutes. ELB health is failing or not available for 1 out of 4 instances.
April 6, 2025 17:40:24 (UTC-5)	INFO	Environment update completed successfully.
April 6, 2025 17:40:24 (UTC-5)	INFO	New application version was deployed to running EC2 instances.
April 6, 2025 17:40:22 (UTC-5)	INFO	Excess instance(s) terminated.
April 6, 2025 17:40:19 (UTC-5)	INFO	Terminating excess instance(s): [i-0c69964b0fd0a257b].
April 6, 2025 17:39:31 (UTC-5)	INFO	Batch 3: Completed application deployment.
April 6, 2025 17:39:26 (UTC-5)	INFO	Batch 3: Registering instance(s) with the load balancer and waiting for them to be healthy.
April 6, 2025 17:39:25 (UTC-5)	INFO	Command execution completed on 3 of 4 instances in environment.
April 6, 2025 17:39:25 (UTC-5)	INFO	Batch 3: Completed application deployment command execution.
April 6, 2025 17:39:25 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:39:05 (UTC-5)	INFO	Batch 3: Starting application deployment command execution.
April 6, 2025 17:38:41 (UTC-5)	INFO	Batch 3: Starting application deployment on instance(s) [i-058f522a7a52f722b].
April 6, 2025 17:38:40 (UTC-5)	INFO	Batch 2: Completed application deployment.
April 6, 2025 17:38:35 (UTC-5)	INFO	Batch 2: Registering instance(s) with the load balancer and waiting for them to be healthy.
April 6, 2025 17:38:35 (UTC-5)	INFO	Command execution completed on 2 of 4 instances in environment.
April 6, 2025 17:38:35 (UTC-5)	INFO	Batch 2: Completed application deployment command execution.
April 6, 2025 17:38:35 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:38:13 (UTC-5)	INFO	Batch 2: Starting application deployment command execution.
April 6, 2025 17:37:50 (UTC-5)	INFO	Batch 2: Starting application deployment on instance(s) [i-0a2f6d99640134e62].
Time	Type	Details
April 6, 2025 17:37:50 (UTC-5)	INFO	Batch 2: Starting application deployment on instance(s) [i-0a2f6d99640134e62].
April 6, 2025 17:37:49 (UTC-5)	INFO	Deploying new version to instance(s).
April 6, 2025 17:37:46 (UTC-5)	INFO	Command execution completed on 1 of 4 instances in environment.
April 6, 2025 17:37:46 (UTC-5)	INFO	Batch 1: Completed application deployment.
April 6, 2025 17:37:12 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:36:43 (UTC-5)	INFO	Batch 1: 1 EC2 instance(s) [i-01e87f7df254f55f4] launched. Deploying application version 'app-7ae2-250406_173459615916'.
April 6, 2025 17:36:14 (UTC-5)	INFO	Environment health has transitioned from Ok to Info. Application update in progress (running for 50 seconds).
April 6, 2025 17:36:14 (UTC-5)	INFO	Added instance [i-01e87f7df254f55f4] to your environment.
April 6, 2025 17:35:26 (UTC-5)	INFO	Rolling with Additional Batch deployment policy enabled. Launching a new batch of 1 additional instance(s).
April 6, 2025 17:35:01 (UTC-5)	INFO	Environment update is starting.

Inmutable

En esta política de despliegue, se requieren crear nuevas instancias. EB va a crear un segundo grupo de instancias con la versión nueva y ambas van a recibir tráfico hasta que todo el segundo grupo de instancias pase los health-checks. La política se configuro con los siguientes parámetros:

▼ Rolling updates and deployments [Info](#)

Application deployments
Choose how Amazon Elastic Beanstalk propagates source code changes and software configuration updates. [Learn more](#)

Deployment policy

Immutable

Batch size type

Percentage

Fixed

Deployment batch size

30

% instances at a time

Entrega 1

Durante el despliegue se verifico que efectivamente se crea un segundo grupo de instancias. En este escenario se puede ver cómo se tienen 6 instancias EC2 corriendo, 3 del grupo nuevo y 3 del grupo original.

Enhanced instance health (6) Info				
	Instance ID	Status	Running time	Deployment
▼ Ok				
<input type="radio"/>	i-0e54e1c6a4...	Application deployment completed 24 seconds ago and took 38 seconds.	1 minute	7
▼ Ok				
<input type="radio"/>	i-0c1a88ba5b...	Application deployment completed 14 seconds ago and took 46 seconds.	1 minute	7
<input type="radio"/>	i-0a8520077d...	Ok	3 minutes	7
<input type="radio"/>	i-01e87f7df25...	Ok	18 minutes	6
<input type="radio"/>	i-0a2fd9964...	Ok	2 hours	6
<input type="radio"/>	i-058f522a7a...	Ok	2 hours	6

En términos del tiempo de despliegue, se tuvo un aproximado de 18min. El tiempo de este despliegue es totalmente dependiente de la cantidad de instancias que se deban desplegar nuevas y el tiempo que toman estas en configurarse y finalmente eliminar las instancias anteriores.

April 6, 2025 18:07:11 (UTC-5)	INFO	Environment health has transitioned from Info to Ok. Application update completed 46 seconds ago and took 17 minutes.
April 6, 2025 18:06:49 (UTC-5)	INFO	Environment update completed successfully.
April 6, 2025 18:06:49 (UTC-5)	INFO	New application version was deployed to running EC2 instances.
April 6, 2025 18:05:11 (UTC-5)	INFO	Removed instance [i-01e87f7df254f5f4] from your environment.
April 6, 2025 18:02:12 (UTC-5)	INFO	Removed instance [i-058f522a7a52f722b] from your environment.
April 6, 2025 17:59:12 (UTC-5)	INFO	Removed instance [i-0a2fd99640134e62] from your environment.
April 6, 2025 17:57:20 (UTC-5)	INFO	Deployment succeeded. Terminating old instances and temporary Auto Scaling group.
April 6, 2025 17:55:47 (UTC-5)	INFO	Waiting for post-deployment configuration to complete.
April 6, 2025 17:55:44 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:55:33 (UTC-5)	INFO	Starting post-deployment configuration on new instances.
April 6, 2025 17:55:06 (UTC-5)	INFO	Attached new instance(s) to the permanent auto scaling group awseb-e-7p5kfdryb-stack-AWSEBAutoScalingGroup-4H9x6Bo3Je2W.
April 6, 2025 17:55:02 (UTC-5)	INFO	Detached new instance(s) from temporary auto scaling group awseb-e-7p5kfdryb-immutable-stack-AWSEBAutoScalingGroup-OuYatyOlCocW.
April 6, 2025 17:54:57 (UTC-5)	INFO	Waiting for instance(s) [i-0a8520077da1a8405,i-0c1a88ba5ba9cf82,i-0e54e1c6a4e264f40] to pass health checks.
April 6, 2025 17:54:56 (UTC-5)	INFO	Adding new instance(s) [i-0c1a88ba5ba9cf82,i-0e54e1c6a4e264f40] to the load balancer.
April 6, 2025 17:54:55 (UTC-5)	INFO	Successfully launched all instances.
April 6, 2025 17:54:12 (UTC-5)	INFO	Added instances [i-0c1a88ba5ba9cf82,i-0e54e1c6a4e264f40] to your environment.
April 6, 2025 17:53:13 (UTC-5)	INFO	Environment health has transitioned from Ok to Info. Application update in progress on 1 instance. 0 out of 1 instance completed (running for 3 minutes).
April 6, 2025 17:53:13 (UTC-5)	INFO	Added instance [i-0a8520077da1a8405] to your environment.
April 6, 2025 17:52:54 (UTC-5)	INFO	Test instance passed health checks. Launching remaining new instances.
April 6, 2025 17:52:33 (UTC-5)	INFO	Waiting for instance(s) [i-0a8520077da1a8405] to pass health checks.
April 6, 2025 17:52:33 (UTC-5)	INFO	Adding new instance(s) [i-0a8520077da1a8405] to the load balancer.
April 6, 2025 17:52:28 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 17:50:40 (UTC-5)	INFO	Created temporary auto scaling group awseb-e-7p5kfdryb-immutable-stack-AWSEBAutoScalingGroup-OuYatyOlCocW.
April 6, 2025 17:50:24 (UTC-5)	INFO	Immutable deployment policy enabled. Launching one instance with the new settings to verify health.
April 6, 2025 17:49:26 (UTC-5)	INFO	Environment update is starting.

Entrega 1

Traffic Splitting

Esta política de despliegue sigue un canary deployment. Para esta prueba fue configurada de la siguiente manera.

Deployment policy

Traffic splitting

Batch size type

- Percentage
- Fixed

Deployment batch size

30

% instances at a time

Traffic Split

50

% to new application versions

Traffic splitting evaluation time

3

minutes

En este despliegue, también se verifico que efectivamente se crea un segundo grupo de instancias que reciben el tráfico nuevo.

Enhanced instance health (6) [Info](#)

	Instance ID	Status	Running time
<input type="radio"/>	i-0fea7ffefd...	Ok	2 minutes
<input type="radio"/>	i-0ab6547efe...	Ok	2 minutes
<input type="radio"/>	i-0080f6fb457...	Ok	2 minutes
<input type="radio"/>	i-0e54e1c6a4...	Ok	27 minutes
<input type="radio"/>	i-0c1a88ba5b...	Ok	27 minutes
<input type="radio"/>	i-0a8520077d...	Ok	29 minutes

Entrega 1

En términos de tiempo de despliegue, se tomó un aproximado de 11min, cabe resaltar que este tiempo pudo haber sido mayor si en la configuración se hubiera dado un mayor tiempo de muestreo.

Time	Type	Details
April 6, 2025 18:29:09 (UTC-5)	INFO	Removed instances [i-0a8520077da1a8405, i-0c1a88ba5ba9c5f82, i-0e54e1c6a4e264f40] from your environment.
April 6, 2025 18:27:09 (UTC-5)	INFO	Environment health has transitioned from Info to Ok. Application update completed 46 seconds ago and took 9 minutes. 3 instances online which meets Auto Scaling group desired capacity of 3.
April 6, 2025 18:26:38 (UTC-5)	INFO	Environment update completed successfully.
April 6, 2025 18:26:38 (UTC-5)	INFO	New application version was deployed to running EC2 instances.
April 6, 2025 18:24:30 (UTC-5)	INFO	Waiting for post-deployment configuration to complete.
April 6, 2025 18:24:26 (UTC-5)	INFO	Instance deployment completed successfully.
April 6, 2025 18:24:15 (UTC-5)	INFO	Starting post-deployment configuration on new instances.
April 6, 2025 18:23:48 (UTC-5)	INFO	Attached new instance(s) to the permanent auto scaling group awseb-e-7p5kfdryb-stack-AWSEBAutoScalingGroup-4H9x6Bo3JezW.
April 6, 2025 18:23:45 (UTC-5)	INFO	Detached new instance(s) from temporary auto scaling group awseb-e-7p5kfdryb-immutable-stack-AWSEBAutoScalingGroup-OI0Jlbo0F20R.
April 6, 2025 18:23:15 (UTC-5)	INFO	Detached old instance(s) from environment auto scaling group awseb-e-7p5kfdryb-stack-AWSEBAutoScalingGroup-4H9x6Bo3JezW.
April 6, 2025 18:23:14 (UTC-5)	INFO	Traffic-splitting deployment: routed all client traffic to the new application version.
April 6, 2025 18:23:14 (UTC-5)	INFO	Traffic-splitting deployment: starting to shift all client traffic to the new application version.
April 6, 2025 18:23:14 (UTC-5)	INFO	Traffic-splitting deployment: evaluation is complete.
April 6, 2025 18:20:13 (UTC-5)	INFO	Traffic-splitting deployment: all instances passed enhanced health check.
April 6, 2025 18:20:12 (UTC-5)	INFO	Waiting for instance(s) (i-0ab6547effea8bb82, i-0efea7ffef9d49902, i-0080f6fb457f1f9d2) to pass health checks.
April 6, 2025 18:20:12 (UTC-5)	INFO	Traffic-splitting deployment: starting evaluation time for 3 minute(s).
April 6, 2025 18:20:12 (UTC-5)	INFO	Traffic-splitting deployment: all instances that have the new application version passed load balancer health checks.
April 6, 2025 18:20:10 (UTC-5)	INFO	Environment health has transitioned from Ok to Info. Application update in progress on 3 instances. 0 out of 3 instances completed (running for 2 minutes).
April 6, 2025 18:20:10 (UTC-5)	INFO	Added instance [i-0efea7ffef9d49902] to your environment.
April 6, 2025 18:19:51 (UTC-5)	INFO	Traffic-splitting deployment: routed 50% of client traffic to the new application version.
Time	Type	Details
April 6, 2025 18:19:51 (UTC-5)	INFO	Traffic-splitting deployment: starting to shift 50% of client traffic to the new application version.
April 6, 2025 18:19:49 (UTC-5)	INFO	Traffic-splitting deployment: successfully launched 3 test instance(s).
April 6, 2025 18:19:10 (UTC-5)	INFO	Added instances [i-0080f6fb457f1f9d2, i-0ab6547effea8bb82] to your environment.
April 6, 2025 18:18:03 (UTC-5)	INFO	Created temporary auto scaling group awseb-e-7p5kfdryb-immutable-stack-AWSEBAutoScalingGroup-OI0Jlbo0F20R.
April 6, 2025 18:17:47 (UTC-5)	INFO	Traffic Splitting deployment policy enabled. Preparing a new fleet for the new application version.
April 6, 2025 18:17:07 (UTC-5)	INFO	Environment update is starting.