

Lesson 05 Demo 11

Creating a Global Accelerator

Objective: To create a Global Accelerator on AWS for enhancing the availability and performance of your applications by intelligently routing traffic across multiple regions and endpoints

Tools required: AWS workspace

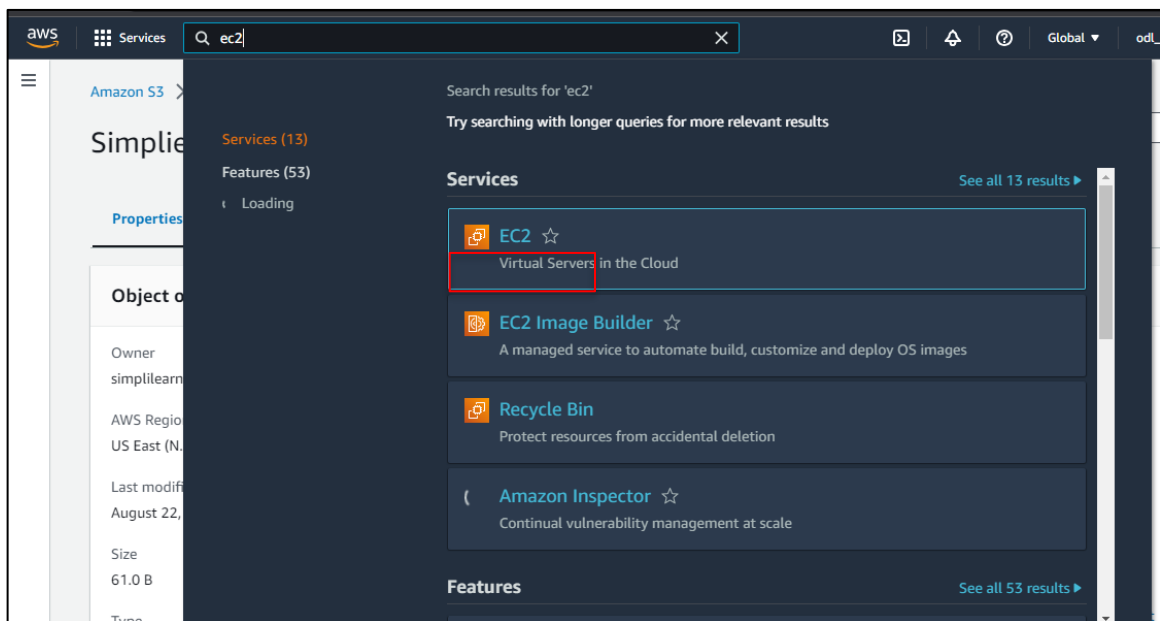
Prerequisites: Previously created EC2 instance

Steps to be followed:

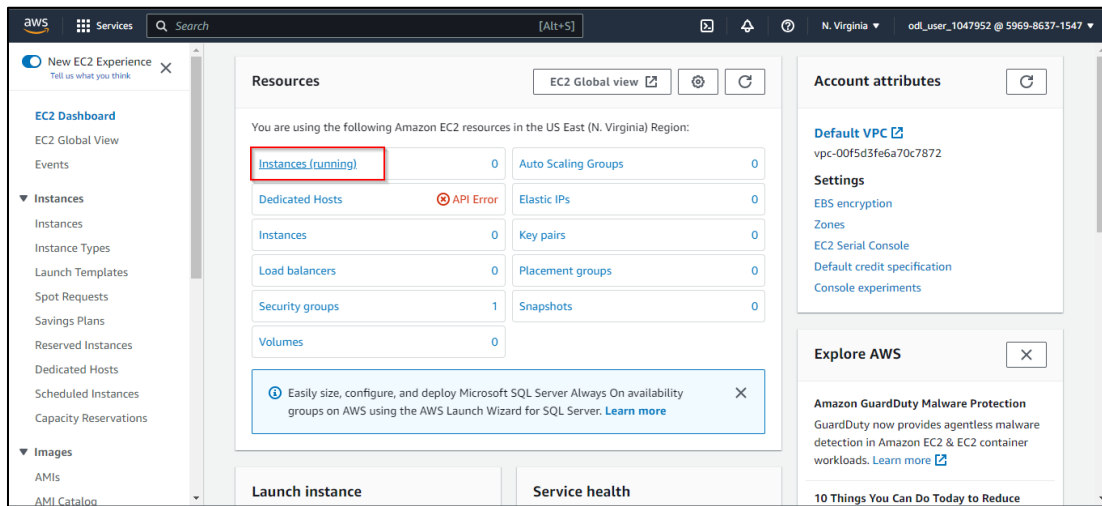
1. Create an EC2 web instance
2. Create a Global Accelerator

Step 1: Create an EC2 web instance

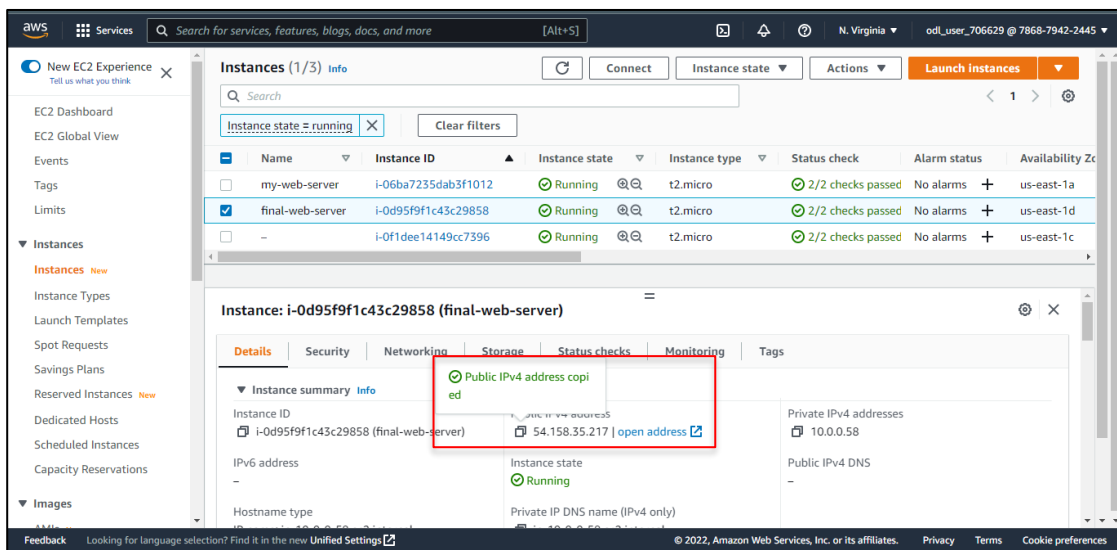
- 1.1 Navigate to the AWS portal home screen, search for, and select **EC2**



1.2 Click on instances(running)

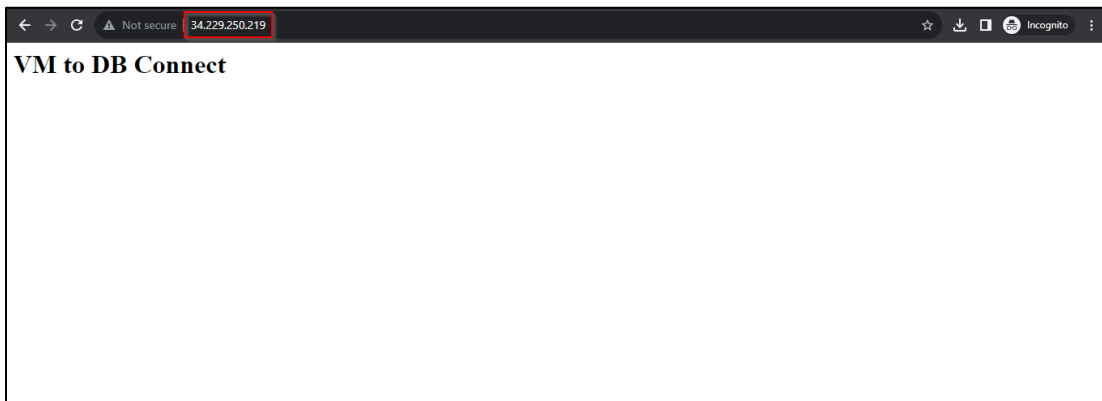


1.3 Select the instance with the website and copy the **Public IPv4 address** from the Details



Note: Refer to **Lesson 03 Demo 05** to know how to create an EC2 web instance

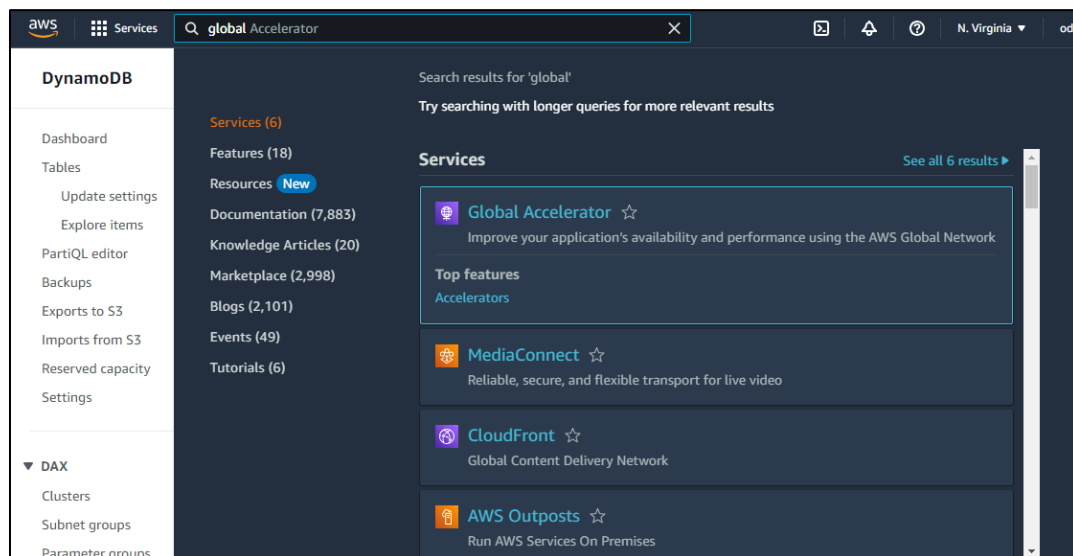
1.4 Open a new browser, paste the copied **Public IPv4 address**, and press enter



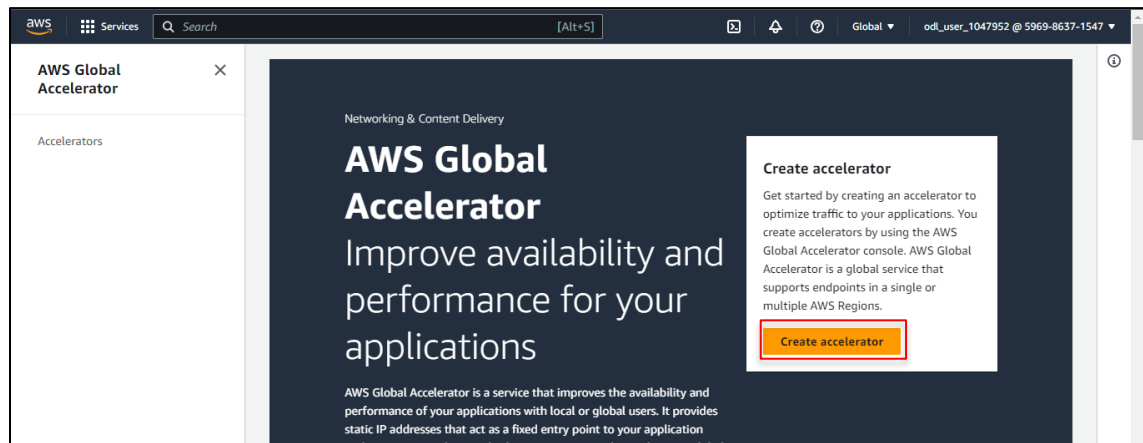
Note: This is required to create a Global Accelerator.

Step 2: Create a Global Accelerator

2.1 Navigate to the AWS portal home screen, search for, and select **Global Accelerator**



2.2 Click on **Create accelerator**



2.3 Provide a name for the accelerator as **myaccelerator** and click **Next**

The screenshot shows the 'Create accelerator' wizard. The 'Accelerator name' field is highlighted with a red box and contains the text 'myaccelerator'. Below it, there's a note: 'Enter only letters, numbers, or hyphens (-), with no spaces.' The 'Accelerator type' section has two options: 'Standard' (selected with a radio button) and 'Custom routing'. The 'IP address type' dropdown is set to 'IPv4'. At the bottom, there are sections for 'IP address pool selection' and 'Tags'. The 'Next' button is highlighted with a red box.

2.4 Enter **80** under the **Ports** section, choose **TCP** under **Protocol**, and proceed by clicking **Next**

The screenshot shows the 'Add listeners' step in the AWS Global Accelerator console. On the left, a sidebar lists the steps: Step 1 (Enter name), Step 2 (Add listeners), Step 3 (Add endpoint groups), and Step 4 (Add endpoints). The main area is titled 'Add listeners' and includes a description: 'A listener is a process that checks for connection requests that arrive to an assigned set of static IP addresses on a port or port range that you specify.' Below this, there's a 'Listeners' section with a table for adding listeners. The table has columns for 'Ports Info', 'Protocol Info', and 'Client affinity Info'. The 'Ports Info' column contains the value '80', the 'Protocol Info' column contains 'TCP', and the 'Client affinity Info' column contains 'NONE'. A 'Remove' button is next to the row. Below the table, there's a text input field for 'Add listener'. At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons. The 'Next' button is highlighted with a red box.

2.5 Select region as **us-east-1**, click on **Next**

The screenshot shows the 'Add endpoint groups' step in the AWS Global Accelerator console. On the left, the same sidebar as in the previous screenshot is visible. The main area is titled 'Add endpoint groups' and includes a description: 'Listeners that direct traffic to one or more endpoint groups. An endpoint group is a collection of endpoints that are used to add an endpoint group, but until you do, traffic to this listener is not routed to the endpoint groups. Each endpoint group can only include endpoints that are associated with the listener.' Below this, there's a 'Traffic dial Info' section with a text input field for '100' and a 'Remove' button. At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons. The 'Next' button is highlighted with a red box.

2.6 Click on **Add endpoint**

AWS Global Accelerator

Accelerators

Add endpoint groups

Step 4
Add endpoints

Listener: 80 TCP
Global Accelerator routes traffic that arrives on these ports to endpoints in regional endpoint groups. All endpoints for an endpoint group must be in the same Region.

▼ **Endpoint group: us-east-1**
Traffic dial: 100%

Endpoint type [Info](#) Endpoint [Info](#) Weight [Info](#)

 [Remove](#)

A number from 0 to 255.

Preserve client IP address [Info](#)
Client IP address preservation is only supported, in specific AWS Regions, for Application Load Balancers and EC2 instances.

☐ Preserve client IP address

Add endpoint

Cancel Previous **Create accelerator**

2.7 Choose the EC2 instance as the Endpoint type

AWS Global Accelerator

Accelerators

Add endpoint groups

Step 4
Add endpoints

Listener: 80 TCP
Global Accelerator routes traffic that arrives on these ports to endpoints in regional endpoint groups. All endpoints for an endpoint group must be in the same Region.

▼ **Endpoint group: us-east-1**
Traffic dial: 100%

Endpoint type [Info](#) Endpoint [Info](#) Weight [Info](#)

 [Remove](#)

A number from 0 to 255.

Preserve client IP address [Info](#)
Client IP address preservation is only supported, in specific AWS Regions, for Application Load Balancers and EC2 instances.

☐ Preserve client IP address

Application Load Balancer
Network Load Balancer
EC2 instance
Elastic IP address

Cancel Previous **Create accelerator**

2.6 Select an endpoint and click on **Create accelerator**

Listener: 80 TCP

Global Accelerator routes traffic that arrives on these ports to endpoints in regional endpoint groups. All endpoints for an endpoint group must be in the same Region.

▼ Endpoint group: us-east-1
Traffic dial: 100%

Endpoint type: EC2

Endpoint Info: i-031e8235c1853bdf3
172.31.39.17

Weight: 128

Remove

Preserve client IP address: ☒ Preserve client IP address

Add endpoint

Cancel Previous **Create accelerator**

Global Accelerator successfully created the accelerator myaccelerator.

View details

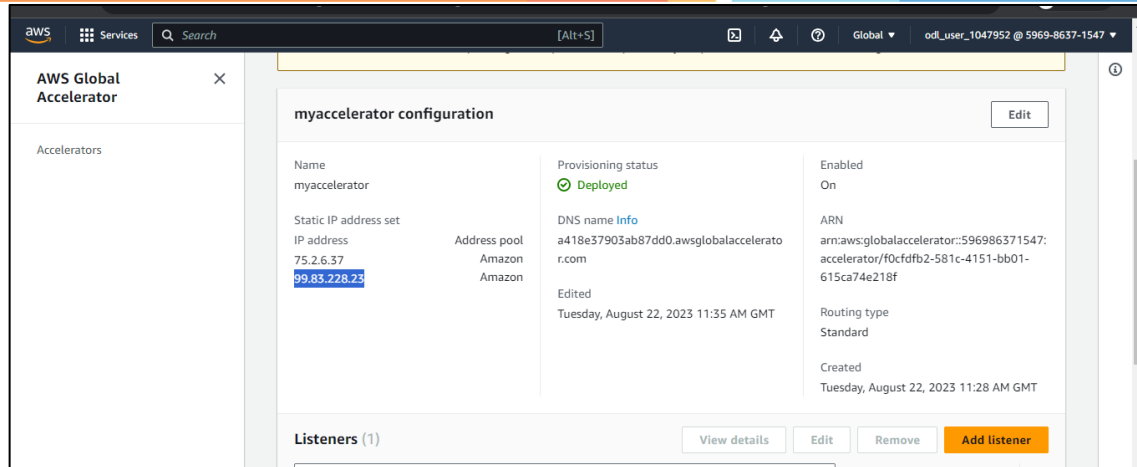
Accelerators (1)

Find accelerators

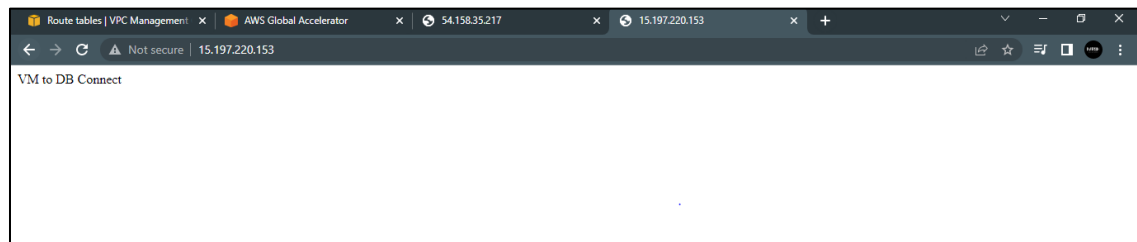
Name	Type	IPv4	IPv6	Enabled	DNS name	Dual stack DNS name
myaccelerator	Standard	75.2.6.37 99.83.228.23		On	a418e37903ab87dd0.awsglobalaccelerator.com	-

The Global Accelerator has been created successfully.

2.7 Copy the IP address



2.8 Paste the IP address in a browser and press enter



By following these steps, you have successfully created a Global Accelerator on AWS to enhance your applications' availability and performance.