

# Module-10: Global Accelerator Assignment - 3

You have been asked to:

1. Create a Global Accelerator
  - a) Make an EC2 instance as an endpoint
  - b) Make a Load Balancer as an endpoint and should be different region than the EC2 instance

New EC2 Experience  
Tell us what you think

EC2 Dashboard  
EC2 Global View  
Events

Instances (1) Info

Search

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status	On status	Availability Zone	Public IPv4 DNS	Public IPv4 ...
<input type="checkbox"/>	module_10_assignment_1_ec2_1	i-062ac694d1bb6690f	Running	t2.micro	Initializing	No alarms	us-east-1c	ec2-54-164-36-237.co...	54.164.36.237

01

Spot Requests  
Savings Plans  
Reserved Instances New  
Dedicated Hosts  
Scheduled Instances  
Capacity Reservations

Create Load Balancer Actions

search : module-10-assignment-3-elb-1 Add filter

<input checked="" type="checkbox"/>	Name	DNS name	State	VPC ID	Availability Zones	Created At	Monitoring
<input checked="" type="checkbox"/>	module-10-assignment-3-elb-1	module-10-assignment-3-elb...	Active	vpc-0bb2355d0d49f42d0	us-east-1a, us-east-1c	application	February 5, 2022 at 12:47:2...

02

aws Services

AWS Organizations

New VPC Experience  
Tell us what you think

VPC Dashboard  
EC2 Global View New  
Filter by VPC:

Search results for 'global Accelerator'

Services (7)  
Features (13)  
Blogs (1,945)  
Documentation (214,468)

Global Accelerator  
Improve your application's availability

03

### Create accelerator

Get started by creating an accelerator to optimize traffic to your applications. You create accelerators by using the AWS Global Accelerator console. AWS Global Accelerator is a global service that supports endpoints in a single or multiple AWS Regions.

Create accelerator

04

1. Ensure that an EC2 instance is created
2. Ensure that an ELB instance is created
3. Search for "Global Accelerator" in AWS console and open it
4. Click on "Create accelerator"

AWS Global Accelerator > Accelerators > Create accelerator

Step 1  
Enter name

Step 2  
Add listeners

Step 3  
Add endpoint groups

Step 4  
Add endpoints

## Enter name

An accelerator includes one or more listeners that direct traffic to one or more endpoint groups. An endpoint group includes endpoints, such as load balancers. Global Accelerator is a global service that supports endpoints in multiple AWS Regions but you must be in the US West (Oregon) Region to create or update accelerators.

### Basic configuration

Enter a name for your accelerator and choose other options for it.

**Accelerator name**  
Provide a name to associate with your accelerator.  
module-10-assignment-3-ga-1

Enter only letters, numbers, or hyphens (-), with no spaces.

**Accelerator type**  
Choose the type of accelerator that you want to create.

☒ **Standard**  
Automatically route traffic to a healthy endpoint that's nearest to your user

☐ **Custom routing**  
Route multiple users to specific EC2 instance destinations in VPC subnets

**IP address type**  
IPv4

► **IP address pool selection**

▼ **Tags**

Key	Value - optional	
Name	module_10_assignment_3_ga_1	Remove
CreatedBy	Hariharan Narayanan	Remove

Add tag

You can add up to 48 more tags.

Cancel Next

AWS Global Accelerator > Accelerators > Create accelerator

Step 1  
Enter name

Step 2  
Add listeners

Step 3  
Add endpoint groups

Step 4  
Add endpoints

## Add listeners

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.

### Listeners

You designate a listener by choosing a specific port or port range to listen on.

Ports info	Protocol info	Client affinity info	
80	TCP	None	Remove

Use commas to separate port numbers or ranges.

Add listener

Cancel Previous Next

## Add endpoint groups

An accelerator includes one or more listeners that direct traffic to one or more endpoint groups. An endpoint group includes endpoints, such as load balancers.

### Listener: 80 TCP

Each listener can have multiple endpoint groups. Each endpoint group can only include endpoints that are in one Region. You aren't required to add an endpoint group, but until you do, traffic to this listener won't reach any endpoints.

Region info	Traffic dial info	
us-east-1	100	Remove

► Configure port overrides

► Configure health checks

us-east-2	100	Remove
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A number from 0 to 100.

► Configure port overrides

► Configure health checks

Add endpoint group

Cancel Previous Next

5. Name the accelerator. Create tags as needed. Click Next
6. Add listeners to listen to 80
7. Add endpoint groups to us-east-1 and us-east-2

Step 1  
Enter name

Step 2  
Add listeners

Step 3  
Add endpoint groups

Step 4  
Add endpoints

## Add endpoints

Now that you've added one or more endpoint groups, you can add endpoints to each one. If you don't have any endpoints yet, create one on the Elastic Load Balancing (ELB) console or create an EC2 Instance. Endpoints must be in the same Region as the endpoint group. You must have the required permissions to view available endpoint resources.

**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  
EC2 Instance

Endpoint Info  
i-062ac694d1bb6690f

Weight Info  
128

Remove

**Preserve client IP address Info**  
Global Accelerator preserves the client IP address for internet-facing Application Load Balancers unless you clear the check box to disable the feature. All internal Application Load Balancers and EC2 instances automatically preserve the client IP address. Make sure that your endpoints are configured to accept traffic from the preserved client IP addresses.  
☒ Preserve client IP address

Application Load Balancer

arn:aws:elasticloadbalancing:us-east-1:9404271387751...

128

Remove

A number from 0 to 255.

☒ Preserve client IP address

Add endpoint

▼ Endpoint group: us-east-2  
Traffic dial: 100%

You don't have any endpoints in this Region.

To route traffic to this Region, add an endpoint in the Region. Then you can add it to this endpoint group and traffic can be routed to the Region.

CancelPreviousCreate accelerator

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AWS Global Accelerator > Accelerators

Accelerators (1)

Find accelerators

View detailsEditDeleteCreate accelerator

Name	Type	Static IP addresses	Enabled	DNS name	Status	Edited
module-10-assignment-3-ga-1	Standard	15.197.150.245, 3.33.151.125	On	aabfd8a141df47a47.awsglobalaccelerator.com	In progress	Saturday, February 5, 2022 7:31 AM GMT

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8. Add the EC2 instance and ELB instance created in (1) and (2) as endpoints. Click on "Create accelerator"

9. Verify that global accelerator is created correctly. This will take some time to show status as "deployed"