

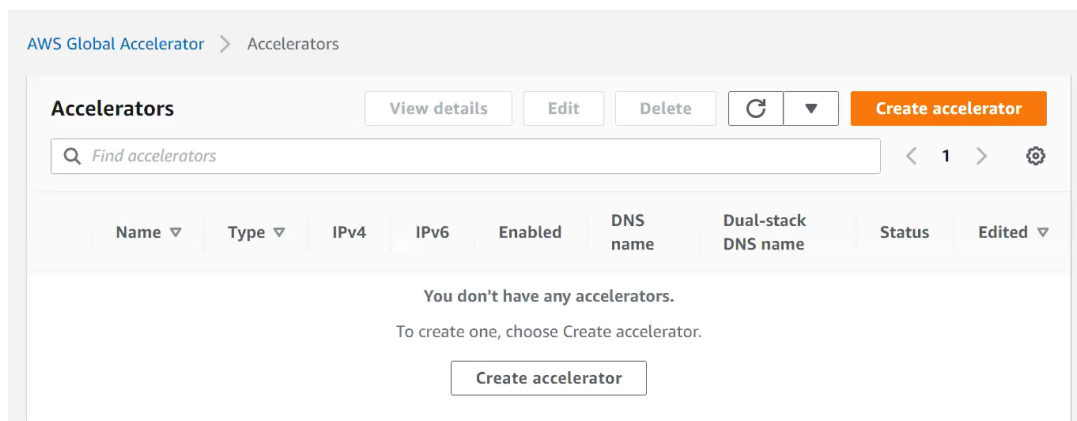
## AWS Session 4

### Summary - 22-01-2023

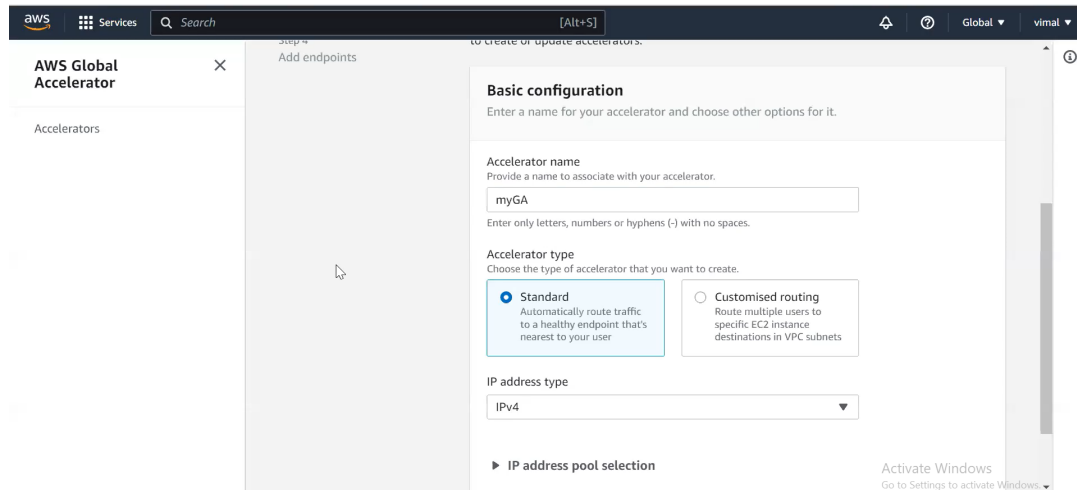
- In AWS all services are categorized into two categories i.e. **utility services** and **standalone services**.
- Any service which is main or core service and they are directly accessing Amazon infrastructure means data centers that service is known as **standalone service** and its prefix is by “**Amazon**”  
For example, Amazon EC2, Amazon S3, etc.
- Any service which does not directly access infrastructure and it also acts as a helper service e.g. serverless or managed service that service is known as **utility service** and its prefix is by “**AWS**”  
For example, AWS Lambda, AWS CloudFormation, etc.
- If we host our website in Virginia using some public IP then we can access that website from anywhere using a public internet network. But as we know our website is hosted in Virginia and if we try to access from India then availability is not a problem we face. We might face performance problems because we access a website using the public internet.
- But if we talk about **AWS Global Network** and if we access a website from India then our network packet automatically finds the nearest data center and from that data center it will go to Virginia using their own global network.
- And if we want to use the Amazon global network then they provide a service which is called **Global Accelerator**.

- **Edge locations** are AWS data centers designed to deliver services with the lowest latency possible. It is a kind of small data center.
- Amazon provides one service which recommends which instance types to use or many more things according to our uses in our instance and that service name is **AWS Compute Optimizer**.
- Any changes that you make to **regional service** then it will be applied per Regions.
- Any changes that you make to **global service** then it will be applied across all Regions.
- **Create Global Accelerator :**

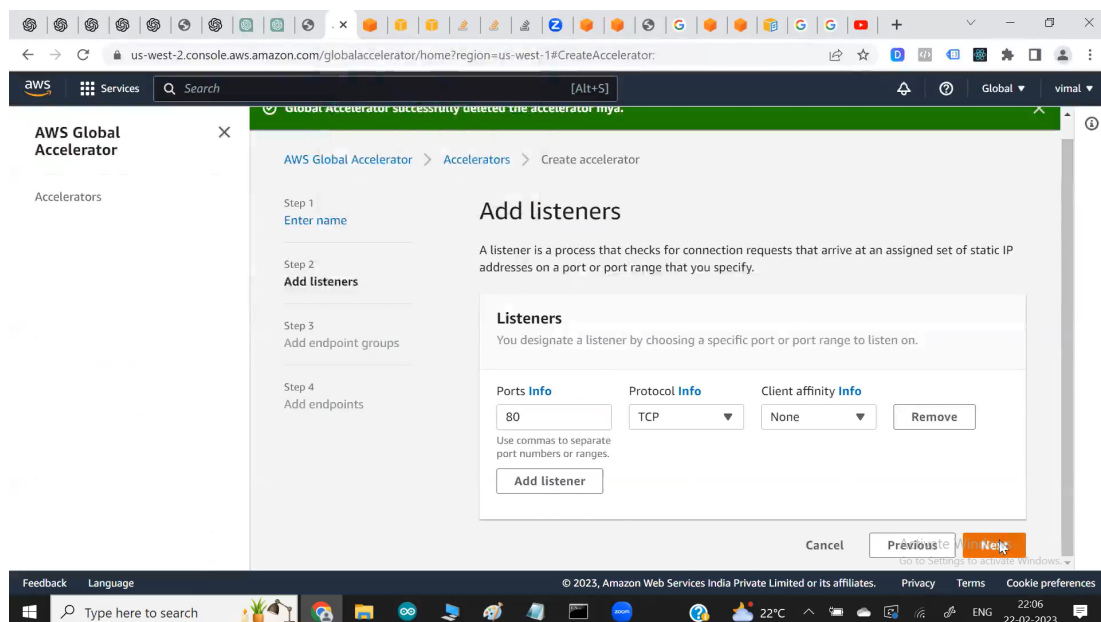
**Step 1 :** Go to AWS Global Accelerator and click on Create accelerator.



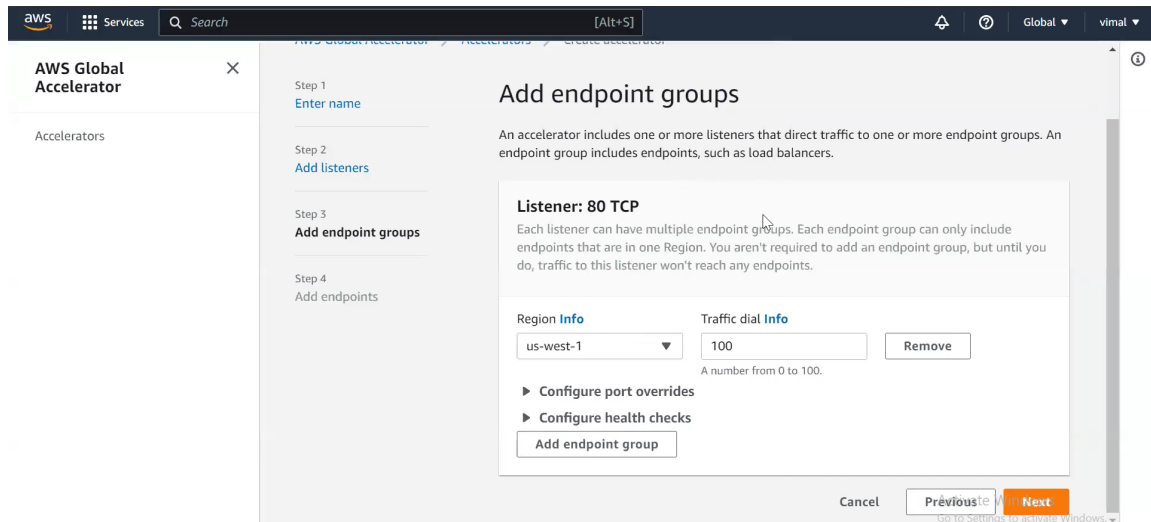
**Step 2 :** Type accelerator name



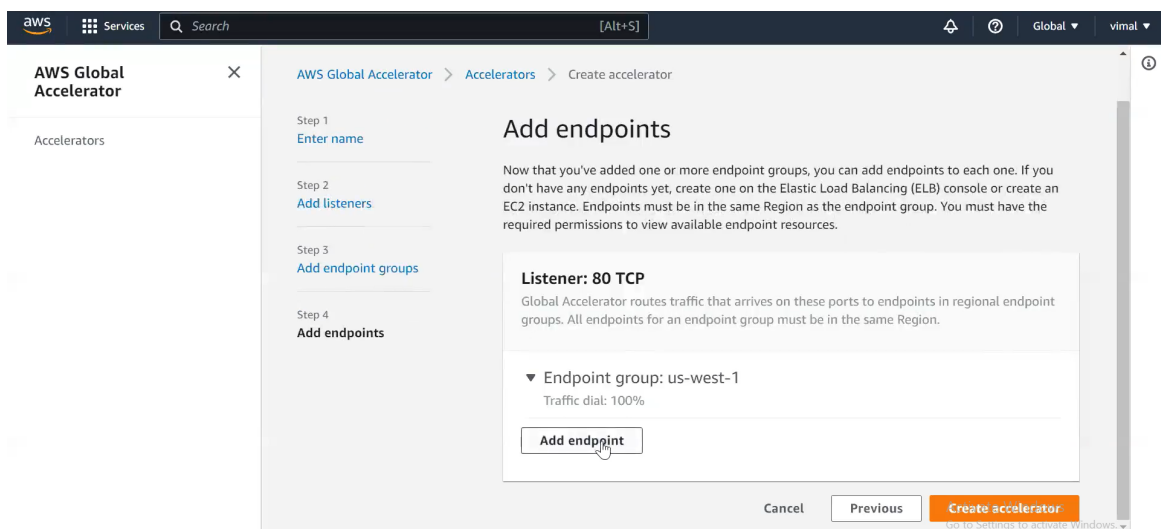
**Step 3 : Add Listeners :** Means, we as a user we are going through global accelerator so we have to give port number and protocol to global accelerator.



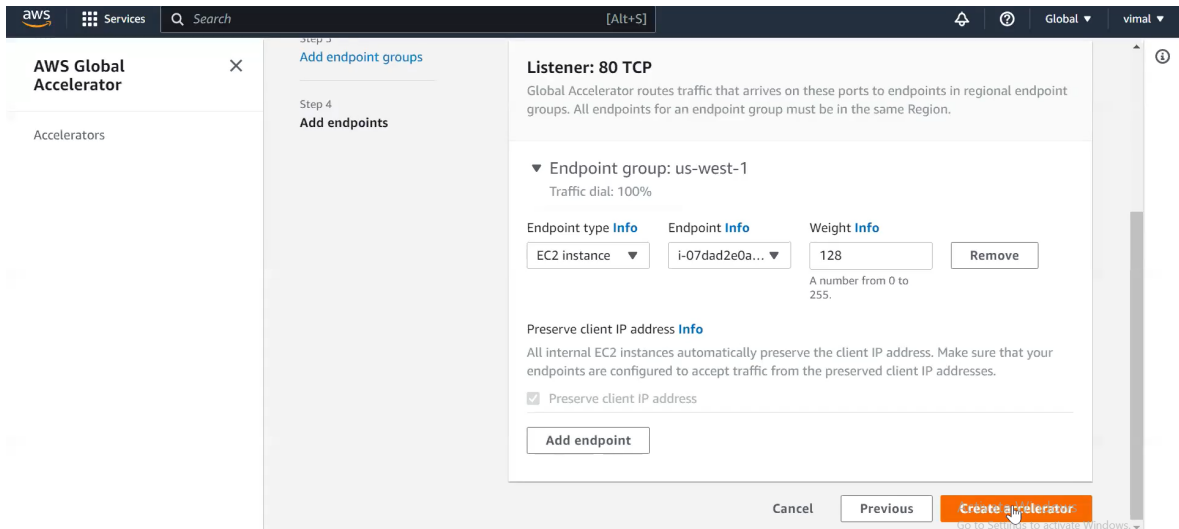
**Step 4 : Add endpoint groups :** Means, we have to select where the web site is running. For example, here website is in the “us-west-1” region.



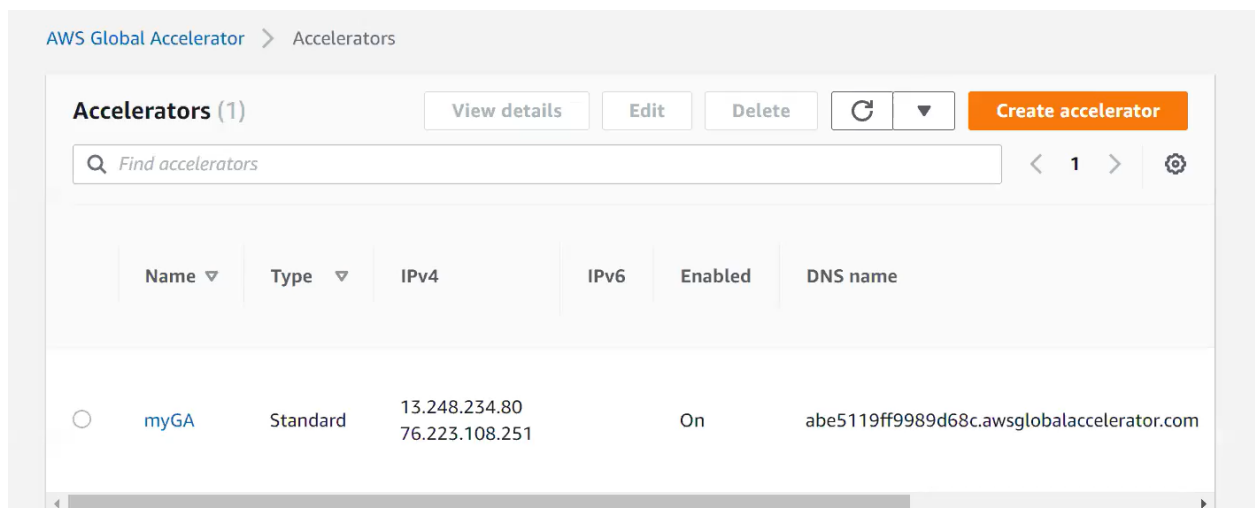
**Step 5 :** Click on “Add endpoint” for adding endpoint.



**Step 6 :** Select endpoint type : Means, here we have to select where the website is hosted. For example ec2 instance or ELB.



Finally after clicking on create accelerator we can see IP address with DNS name.



- If we shutdown an instance where a website is hosted then the public ip address of the instance will be changed and the client of that website if they try to connect using an old ip address then they won't be able to connect. They have to use a new public ip address. But if we talk about a global

accelerator then they automatically found the ip address of their endpoint means here instance public ip address.