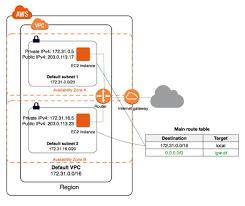
Vpc ,Ec2, Elastic load balancer and Auto scaling

**VPC**

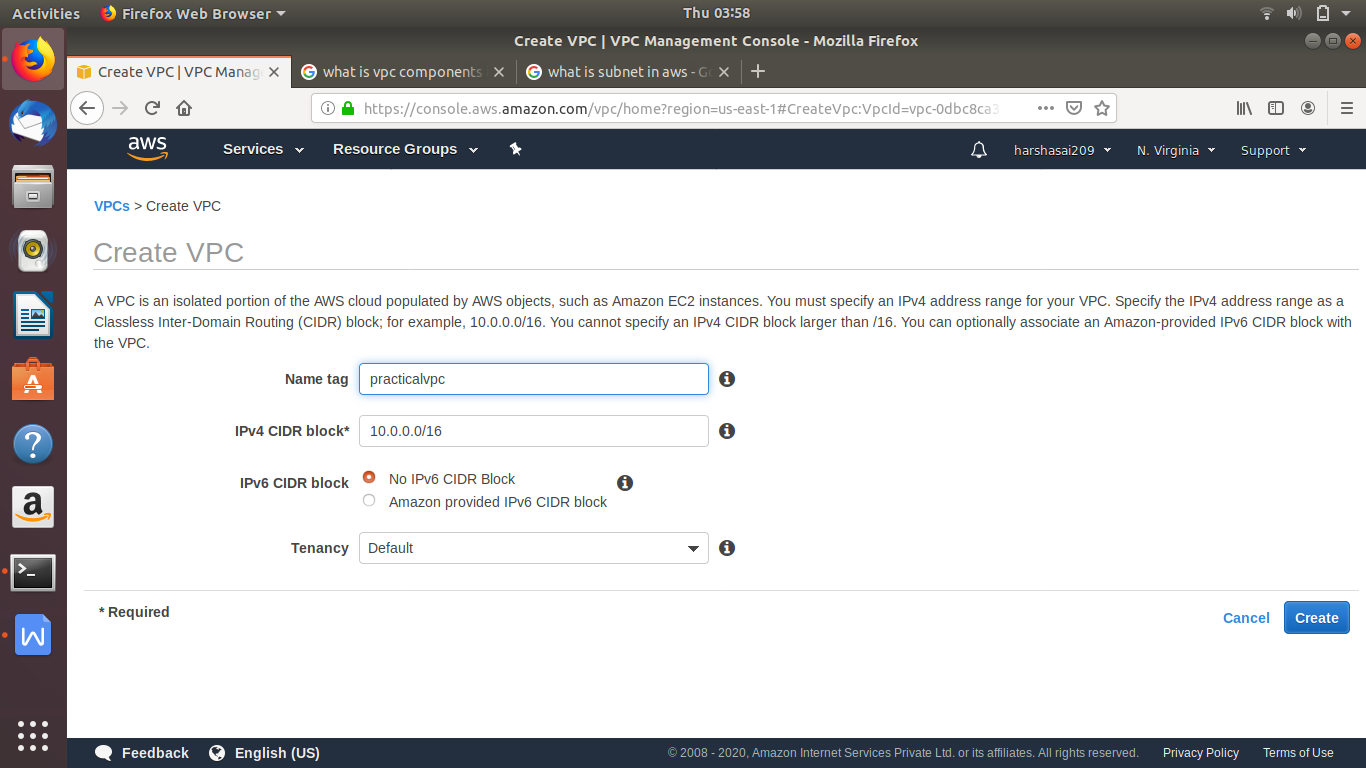
**What is vpc**

Amazon Virtual Private Cloud (Amazon **VPC**) lets you provision a logically isolated section of the **AWS** Cloud where you can launch **AWS** resources in a virtual network that you define. ... You can use both IPv4 and IPv6 in your **VPC** for secure and easy access to resources and applications.



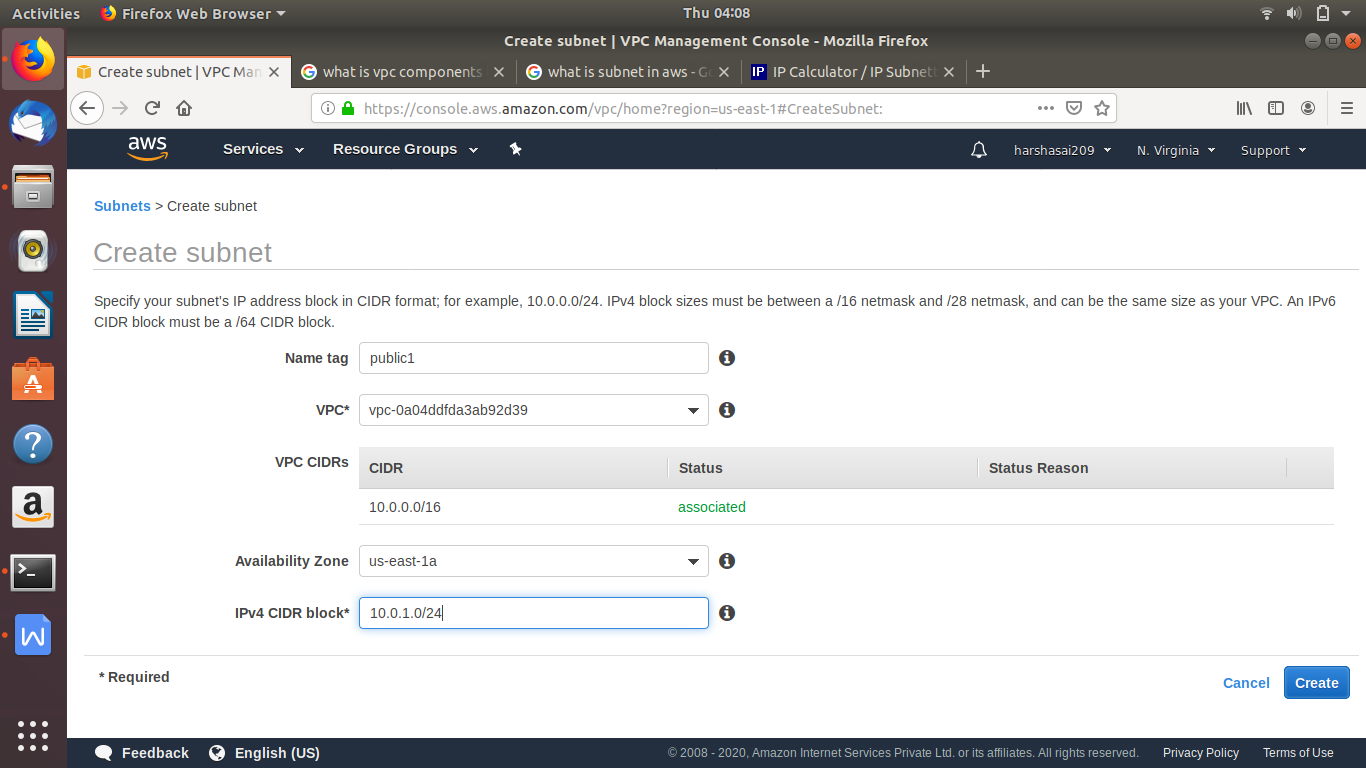
* Subnets.
* Elastic network interfaces.
* Route tables.
* Internet gateways.
* Elastic IP addresses.
* VPC endpoints.
* NAT.
* VPC peering.

**Creating vpc**

****

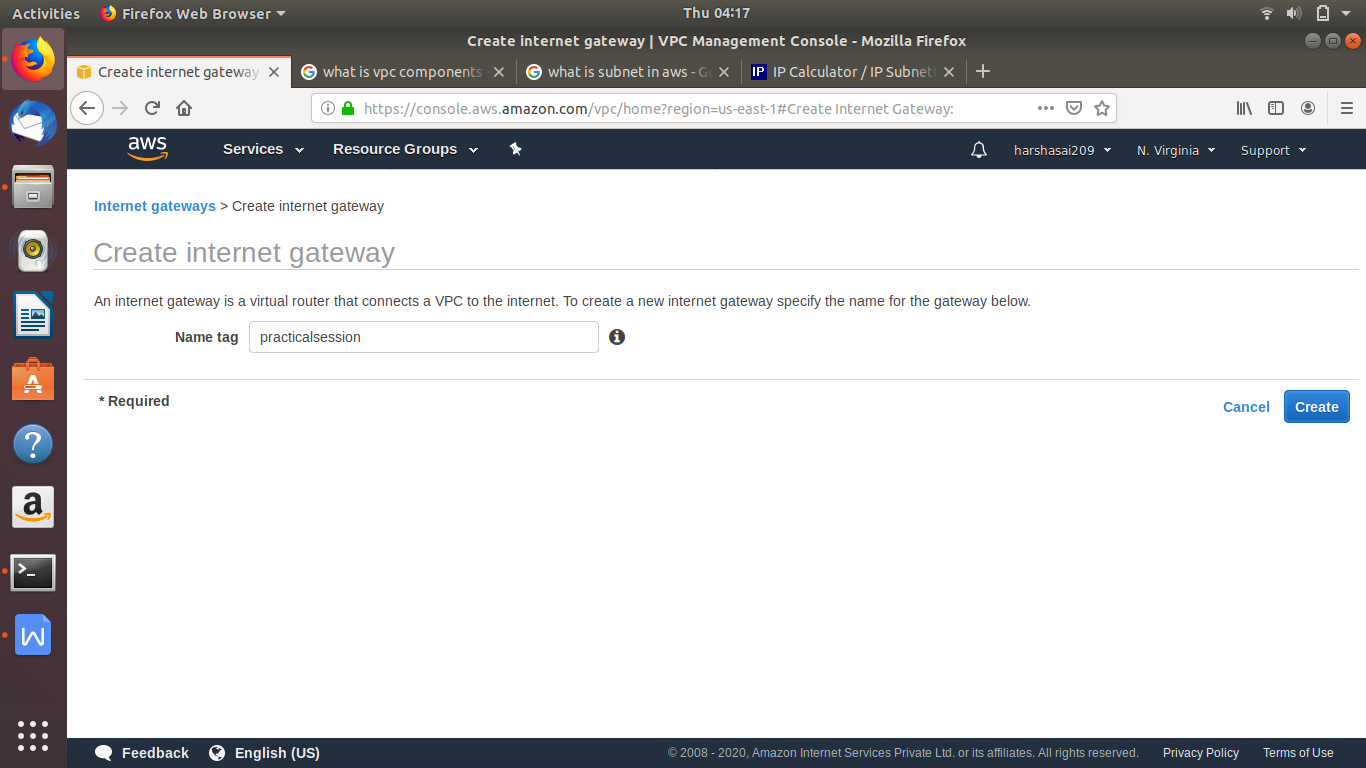
**Now successfully vpc created**

**Now creating subnets for differnet availablity zones**

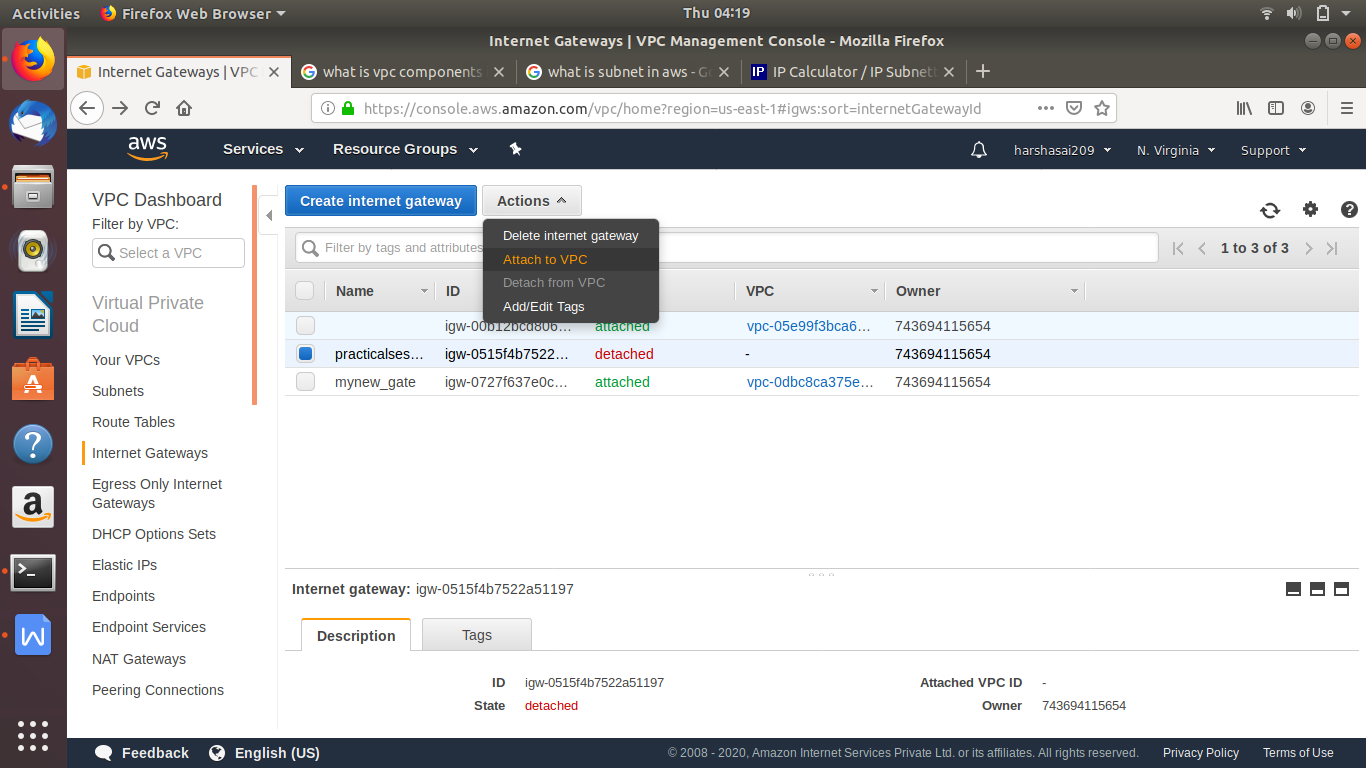
****

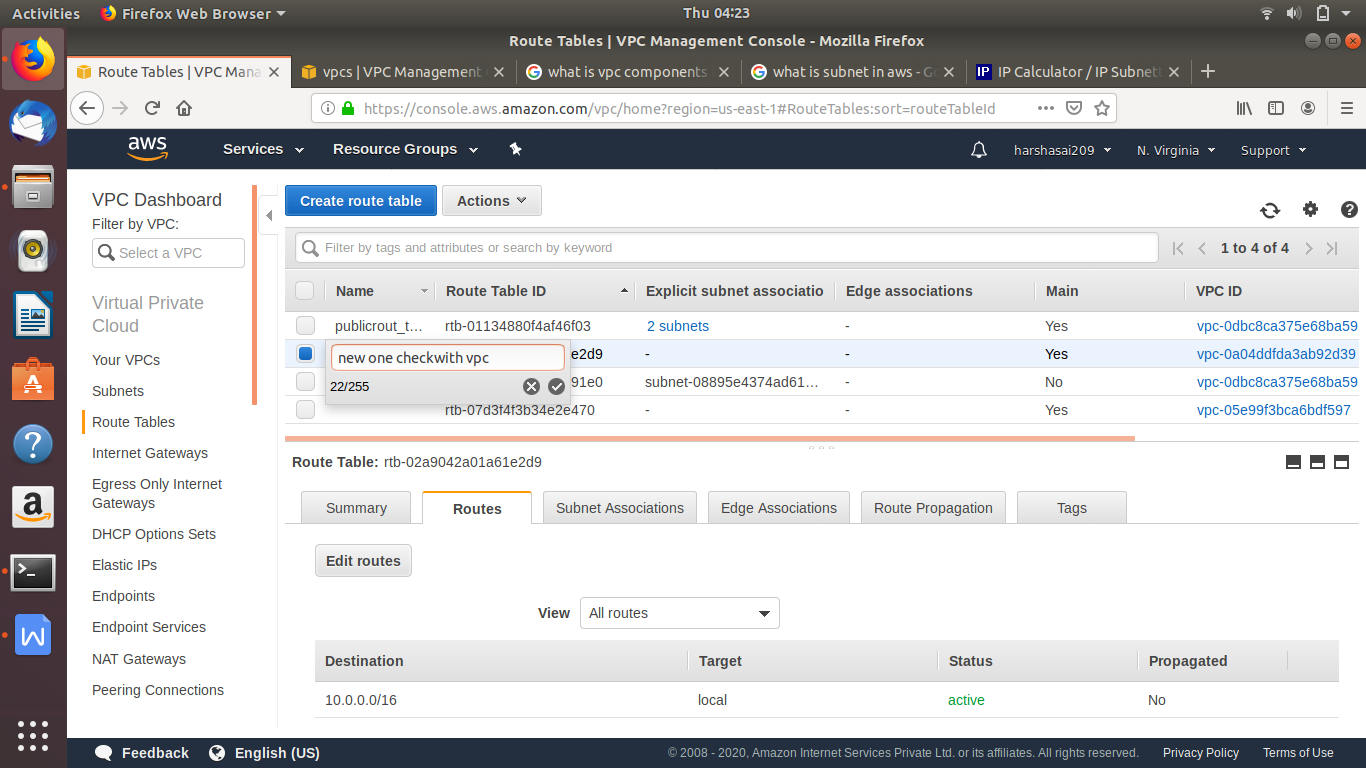
**Now creating another subnet**

**Now creating igw**

****

**Now internet gateway is created**

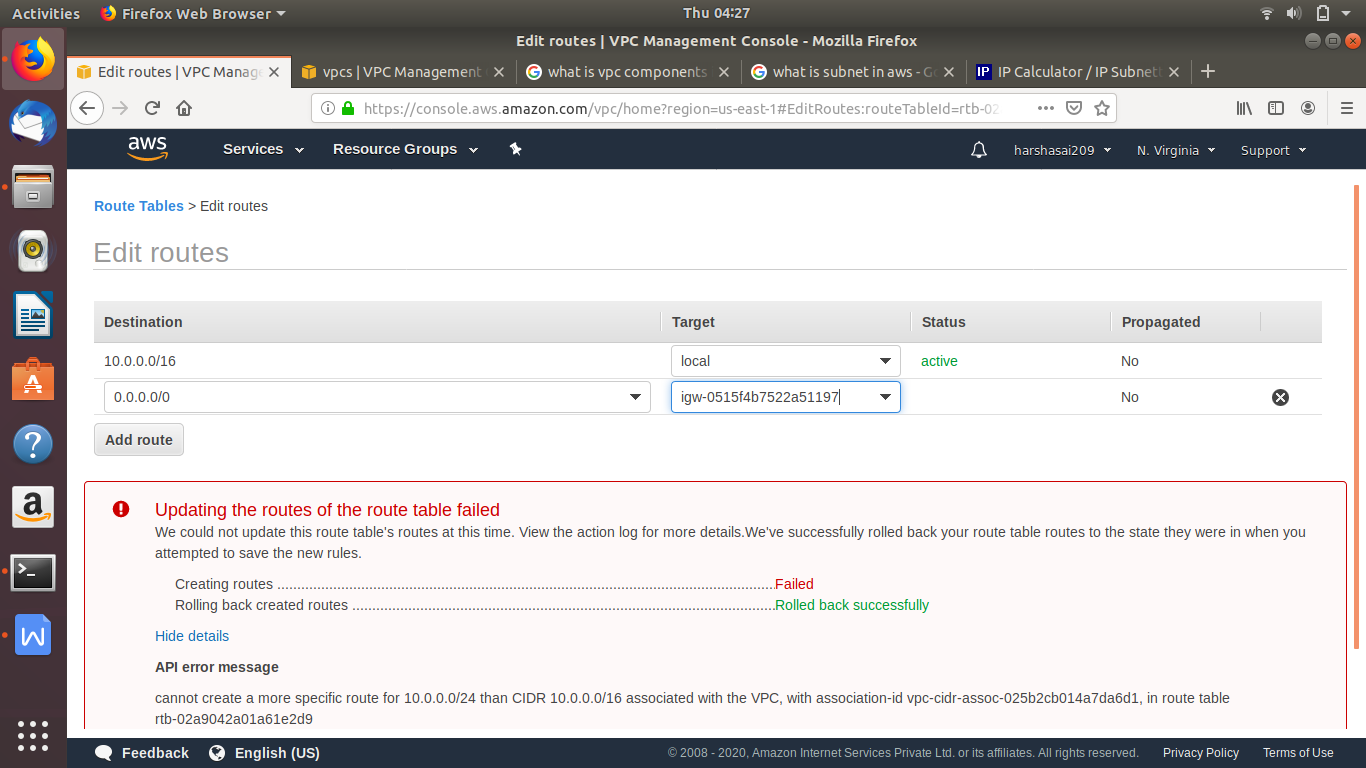
**Now we have to attach to new vp**

**While creating a vpc there is default route table is created**

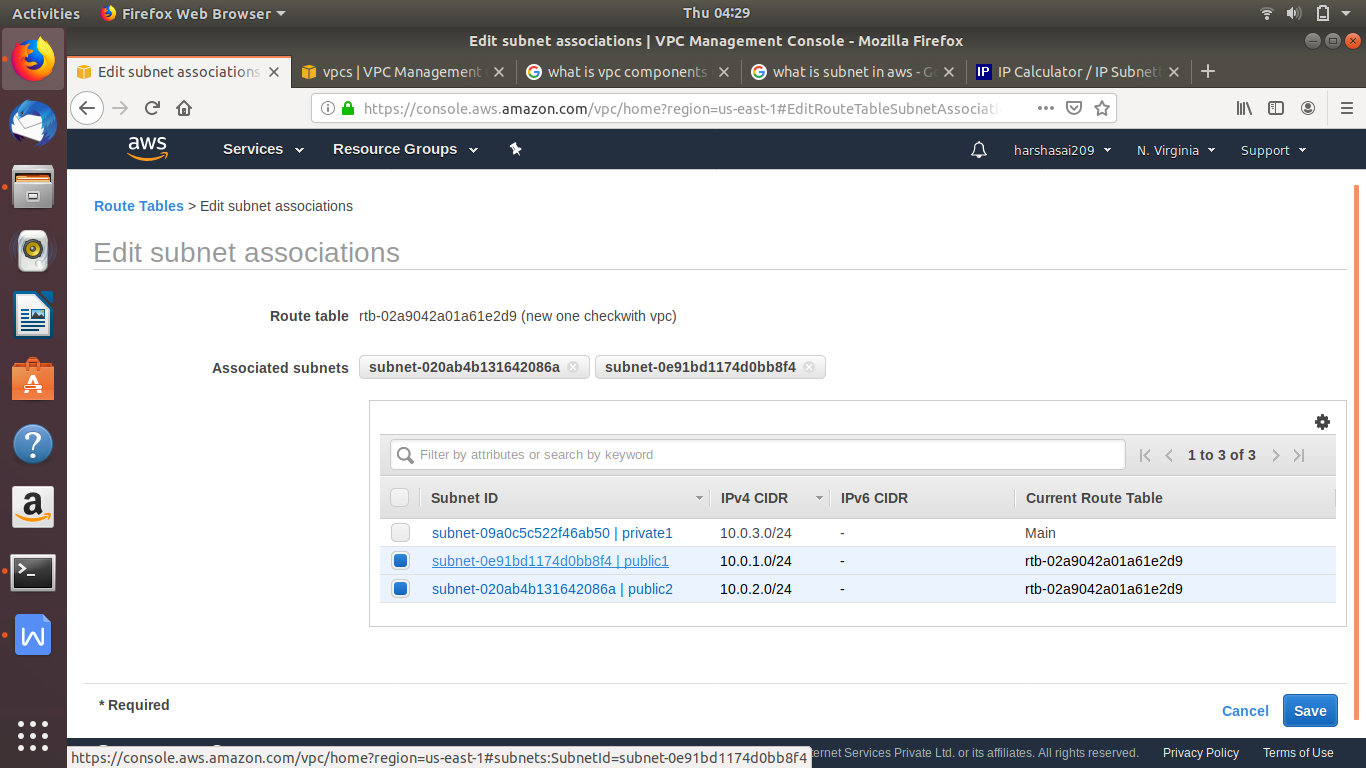
**Option yes will appeared**

**We have to attach subnets to route table which are going to public subnet**

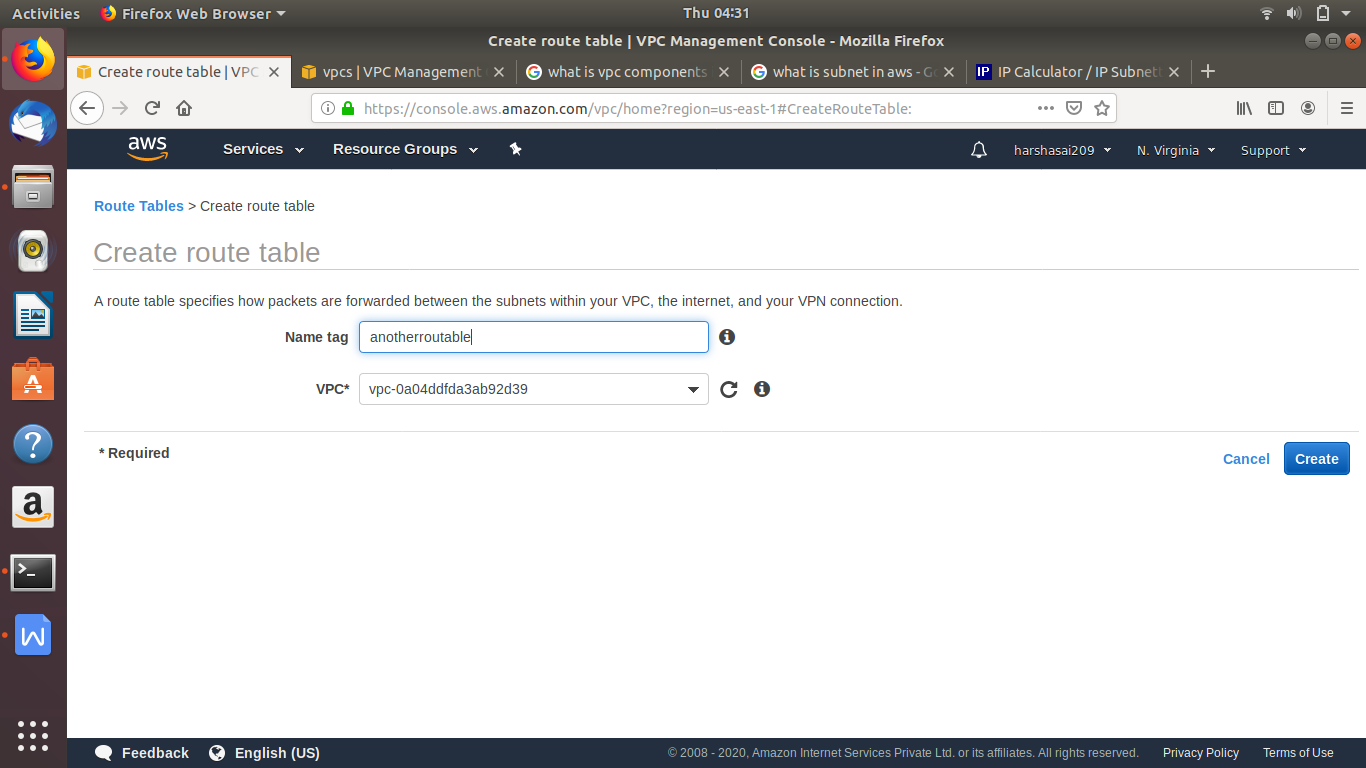
**For route table adding igw (internet gate way)**

****

**Adding required subnets to igw route table**

****

**Now creating a route table for private subnets for routing**

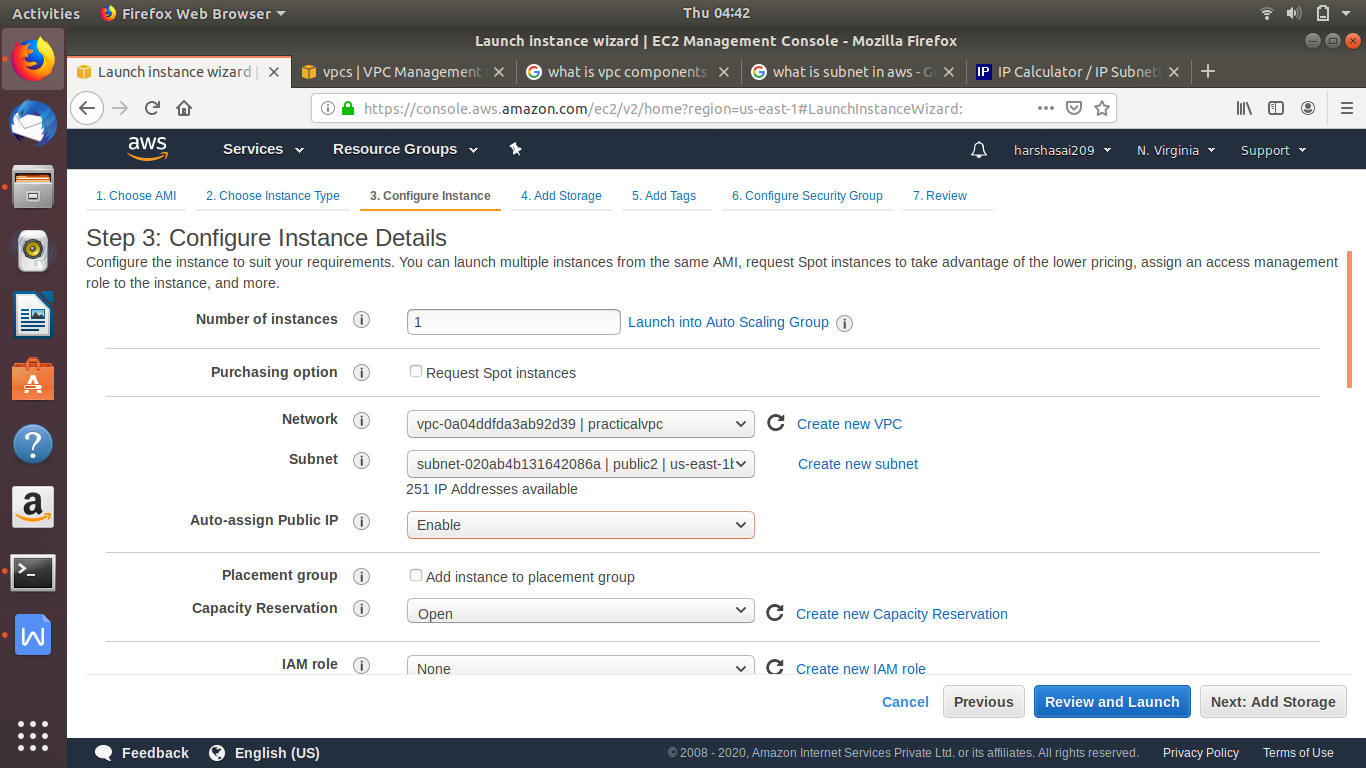
****

**Now required private sub-net is added another rout table**

**Now create a ec2 in public sub net with respect its availability zones**

**While creating load balance we required two instance which are in different availability zones**

**Now creating two ec2 instance with two different subnets which are in different availability zones**

****

**Taking two instance which are in different availablity zones**

**now each instance installed with apache2**

**And now content of index.html is change to hi world in both cases**

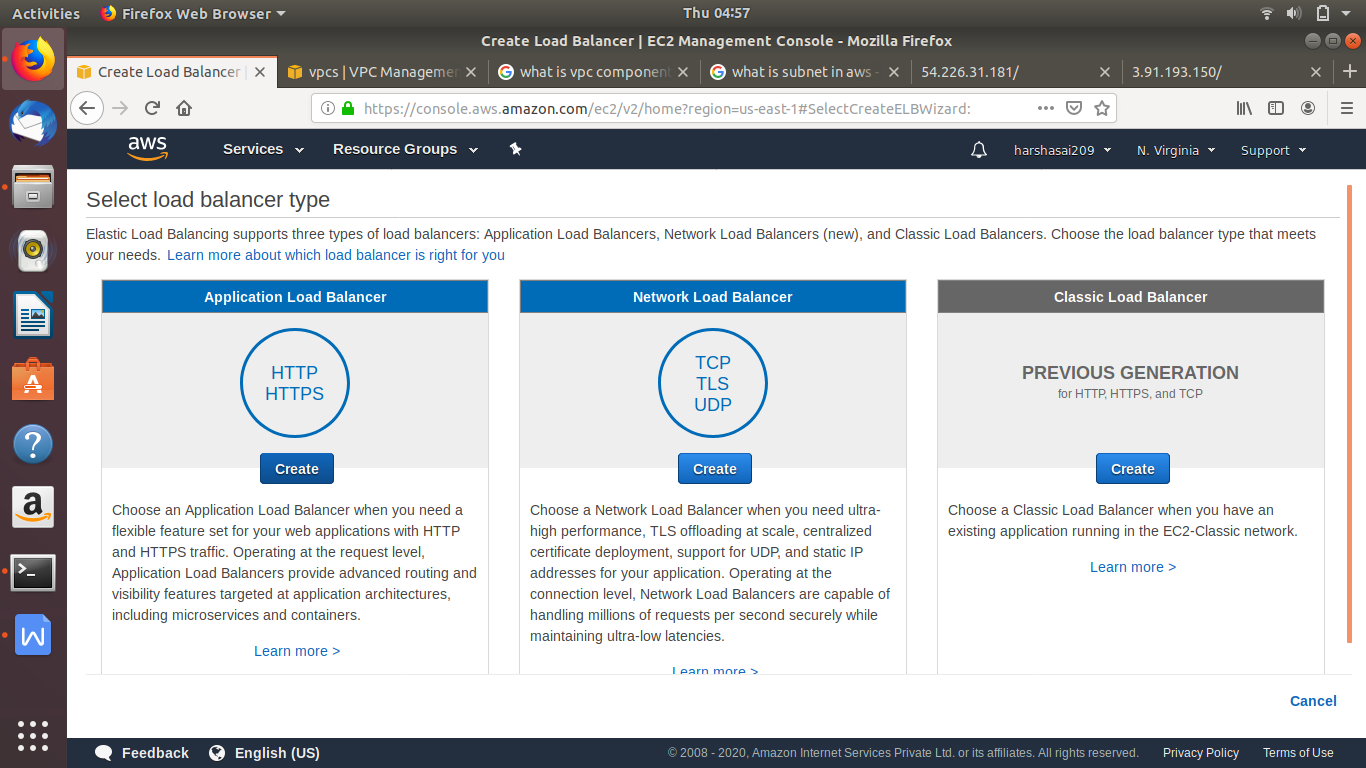
**First case hi world1**

**In second instance hi world 2**

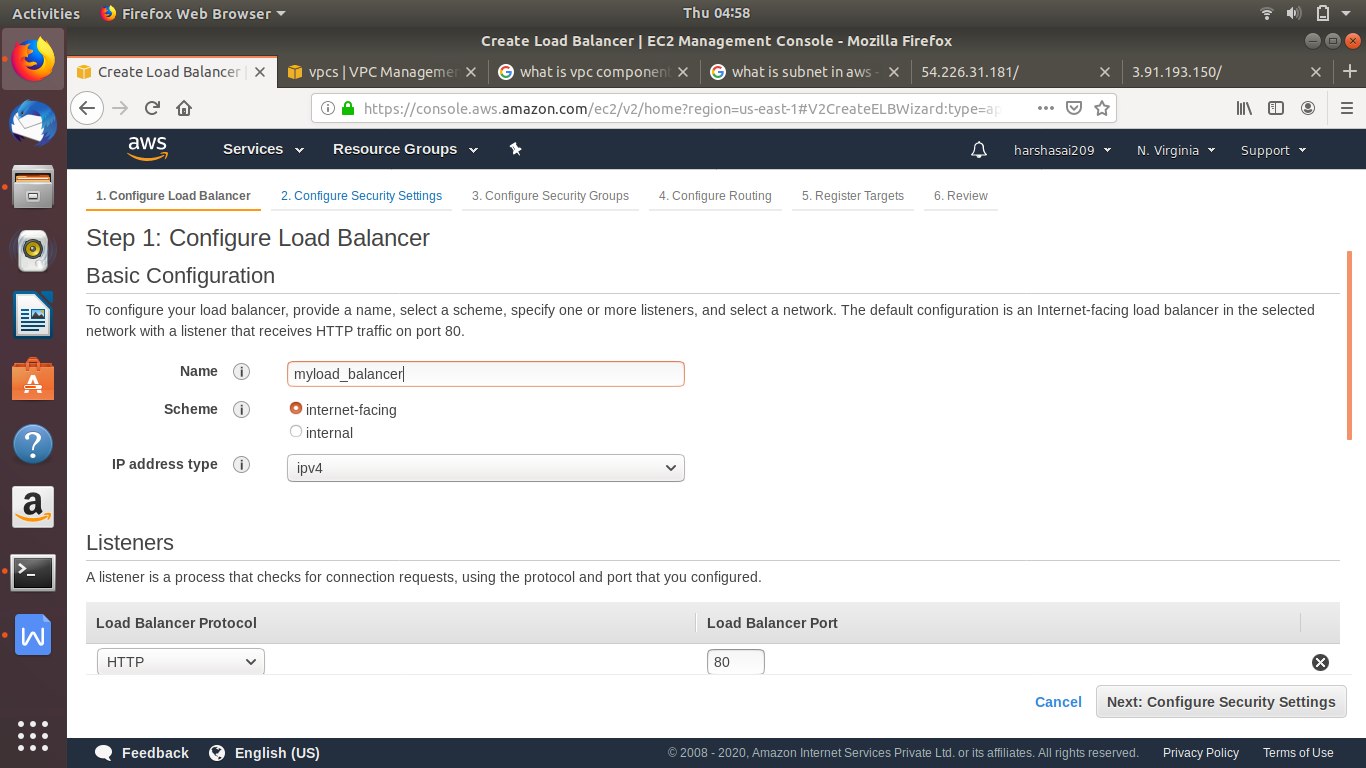
**Now creating load balancer**

**Select load balance option**

**Now here selecting application load balance**

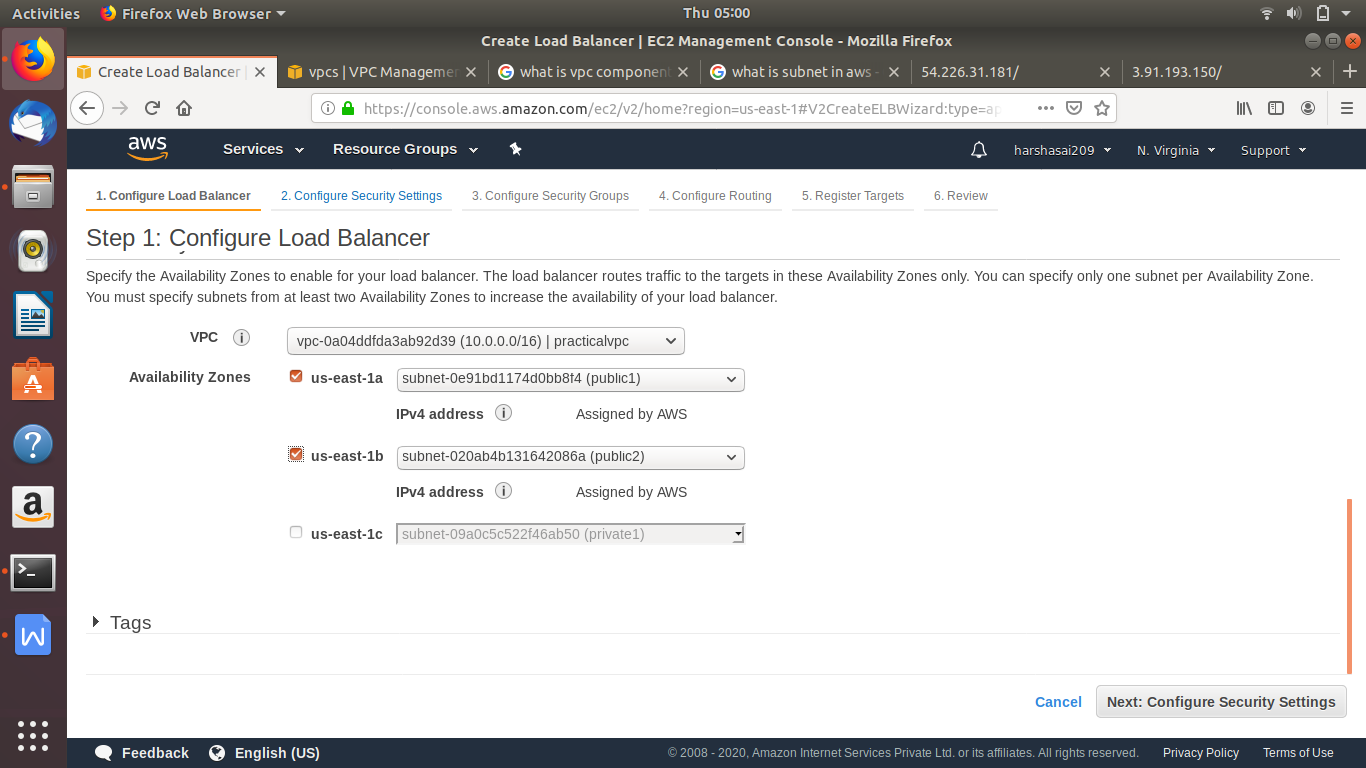
****

**Next step**

****

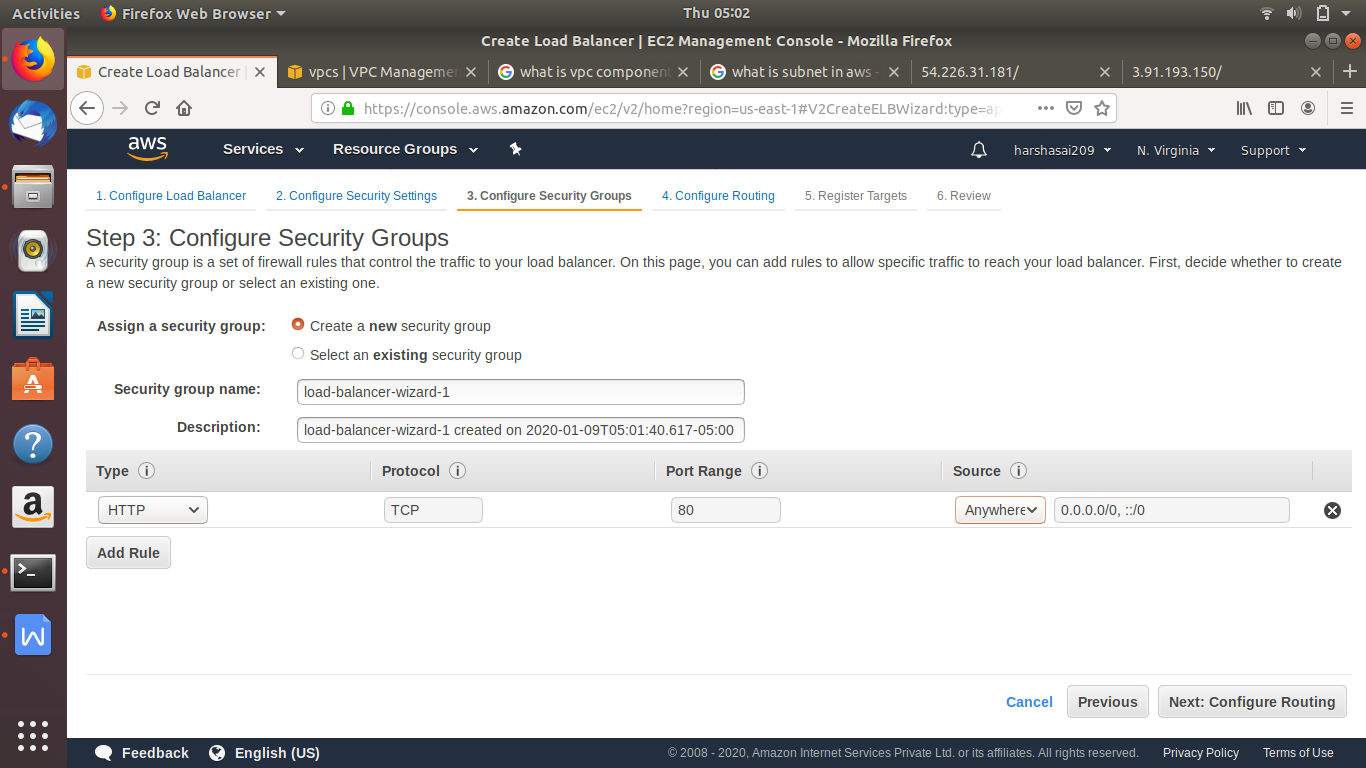
**Now go to advance settings**

**Select two subnets which are in different zones**

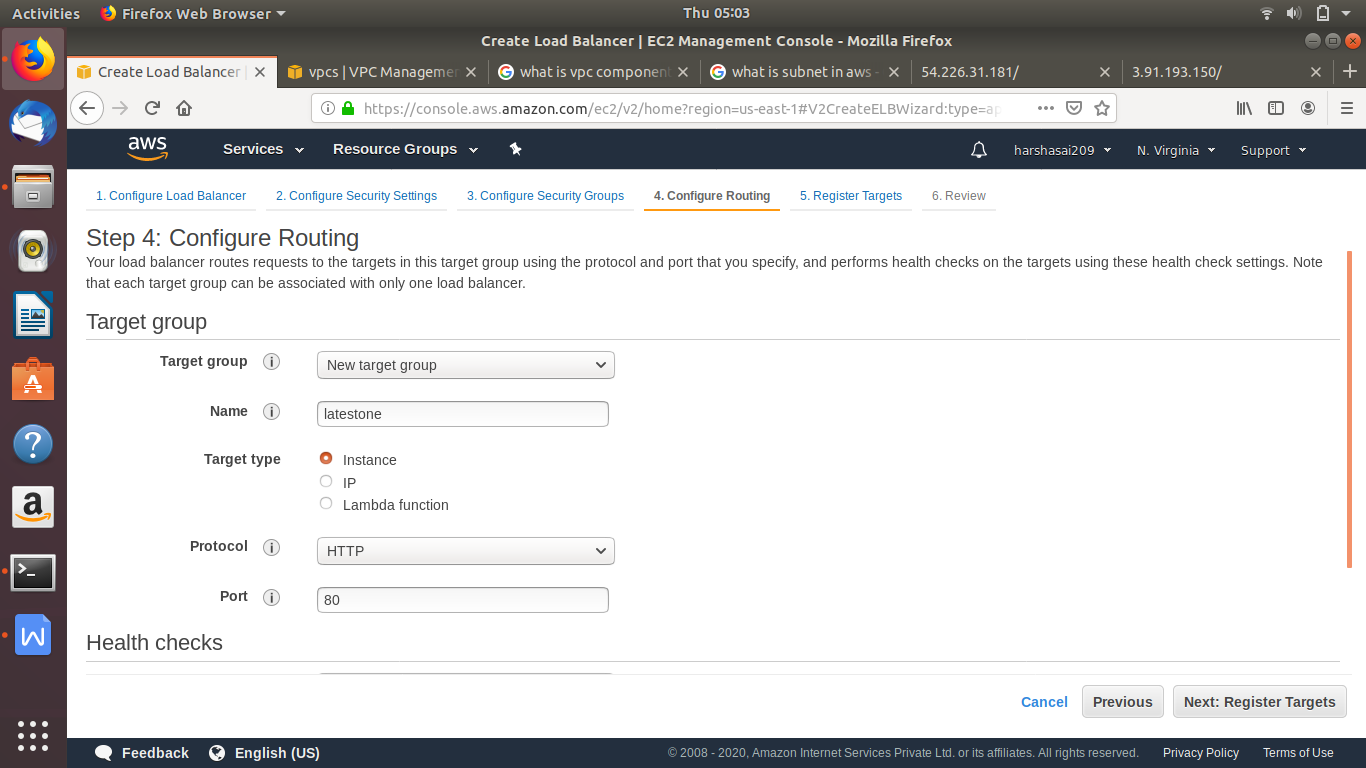
****

**Security groups**

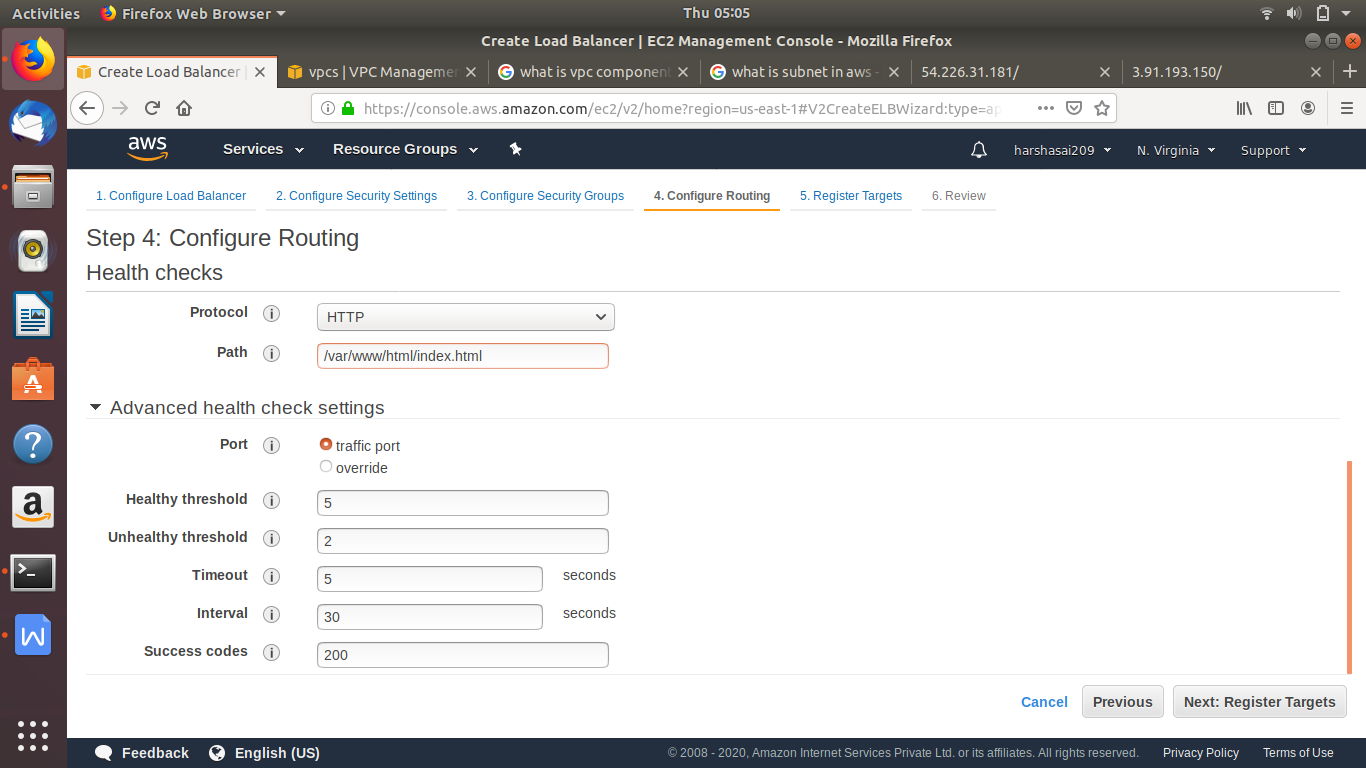
**For load balance**

****

**Now creating a target group**

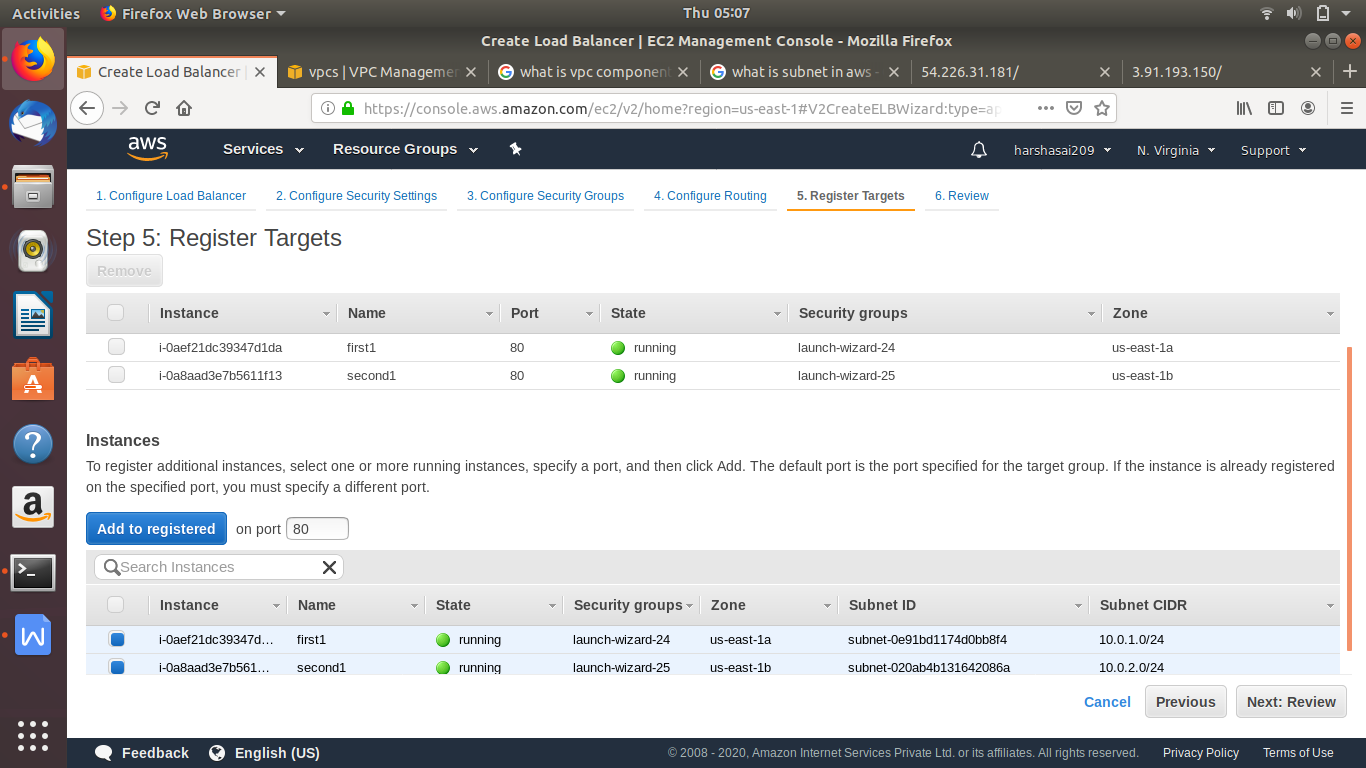
****

**Now give path of index.html path**

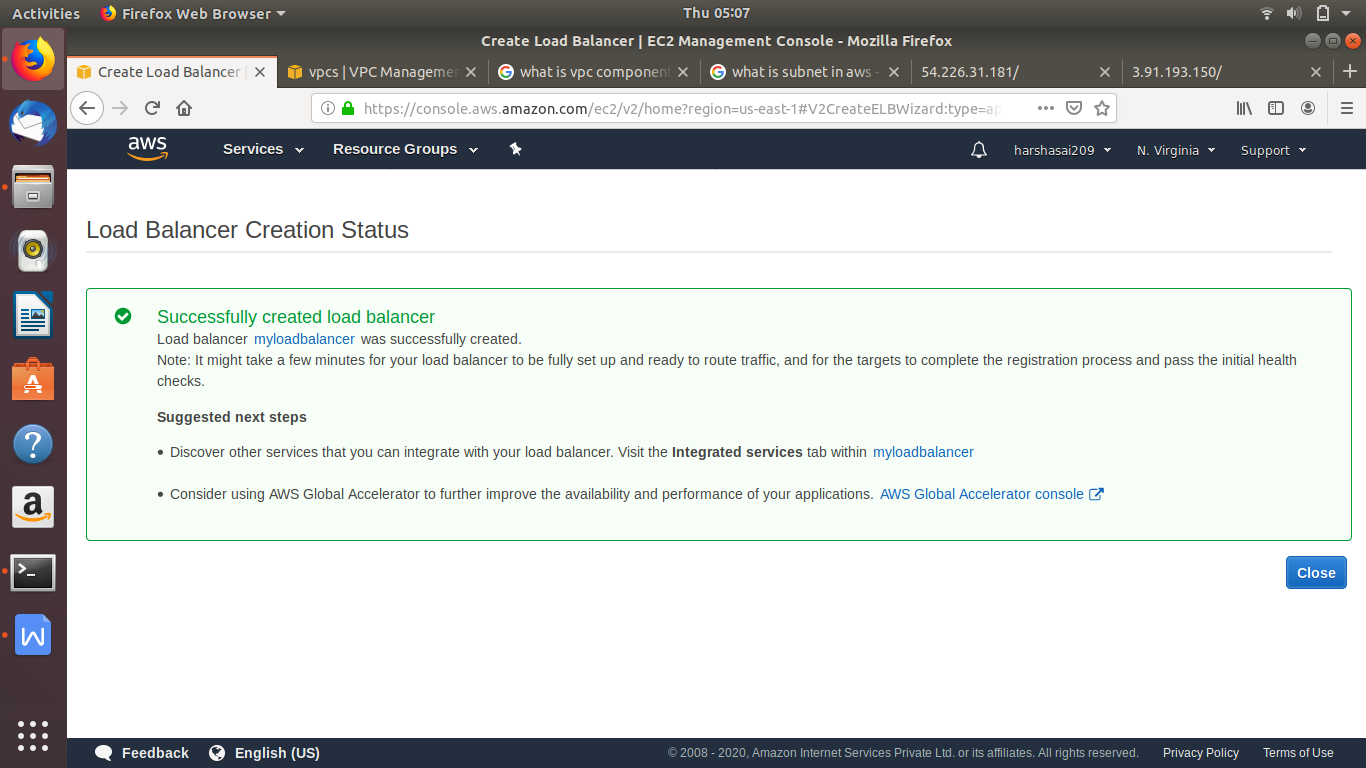
****

**In registry targets**

**Adding these instance which are availble in subnets**

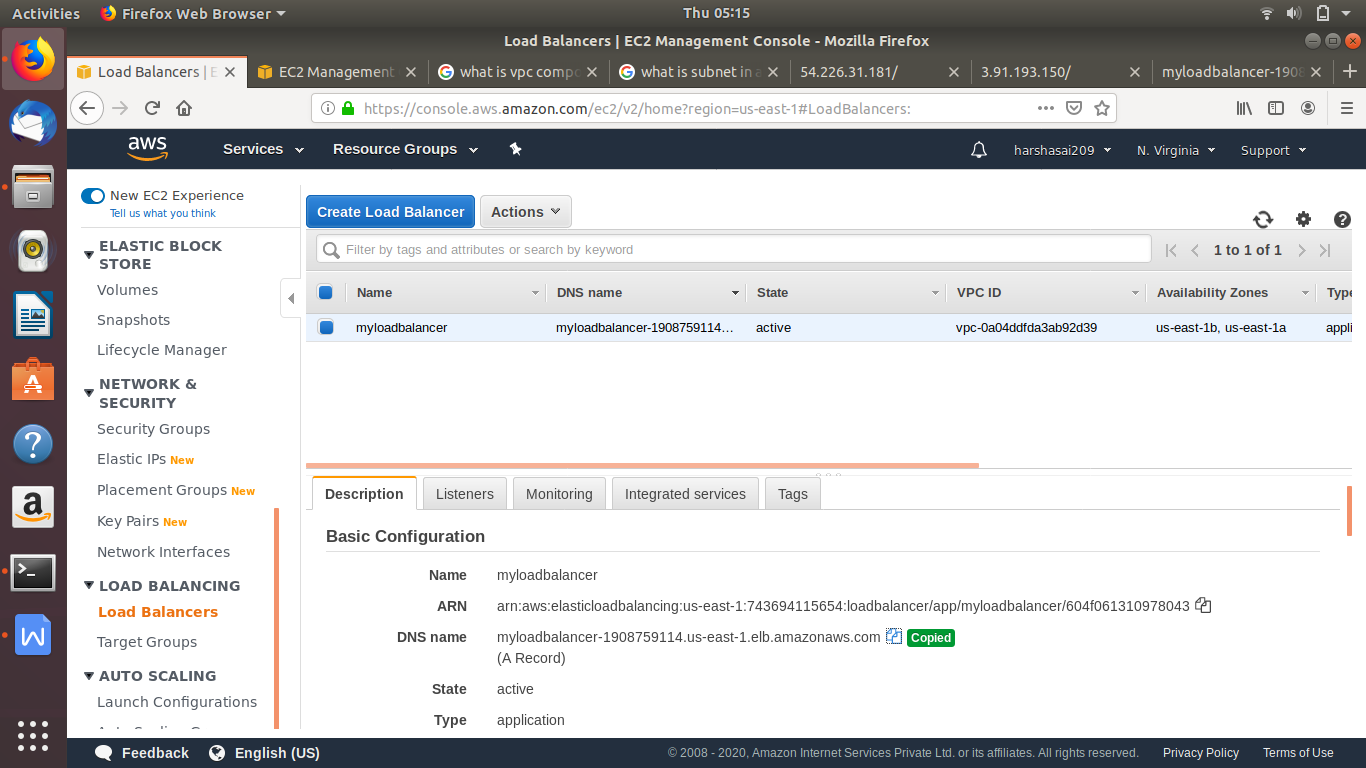
****

**Now load balancer is created**

****

**Wait for some time until load balance up**

**Copy domain name and paste it web browser**

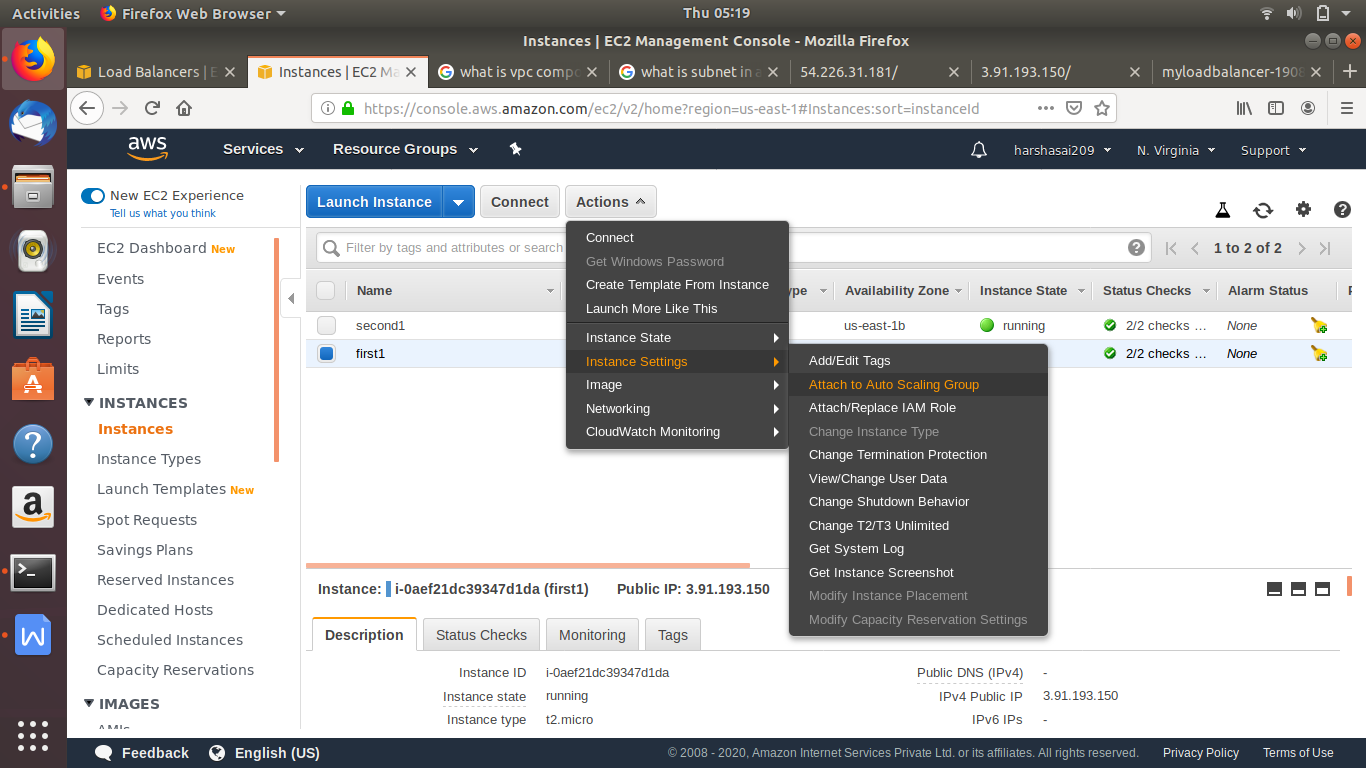
****

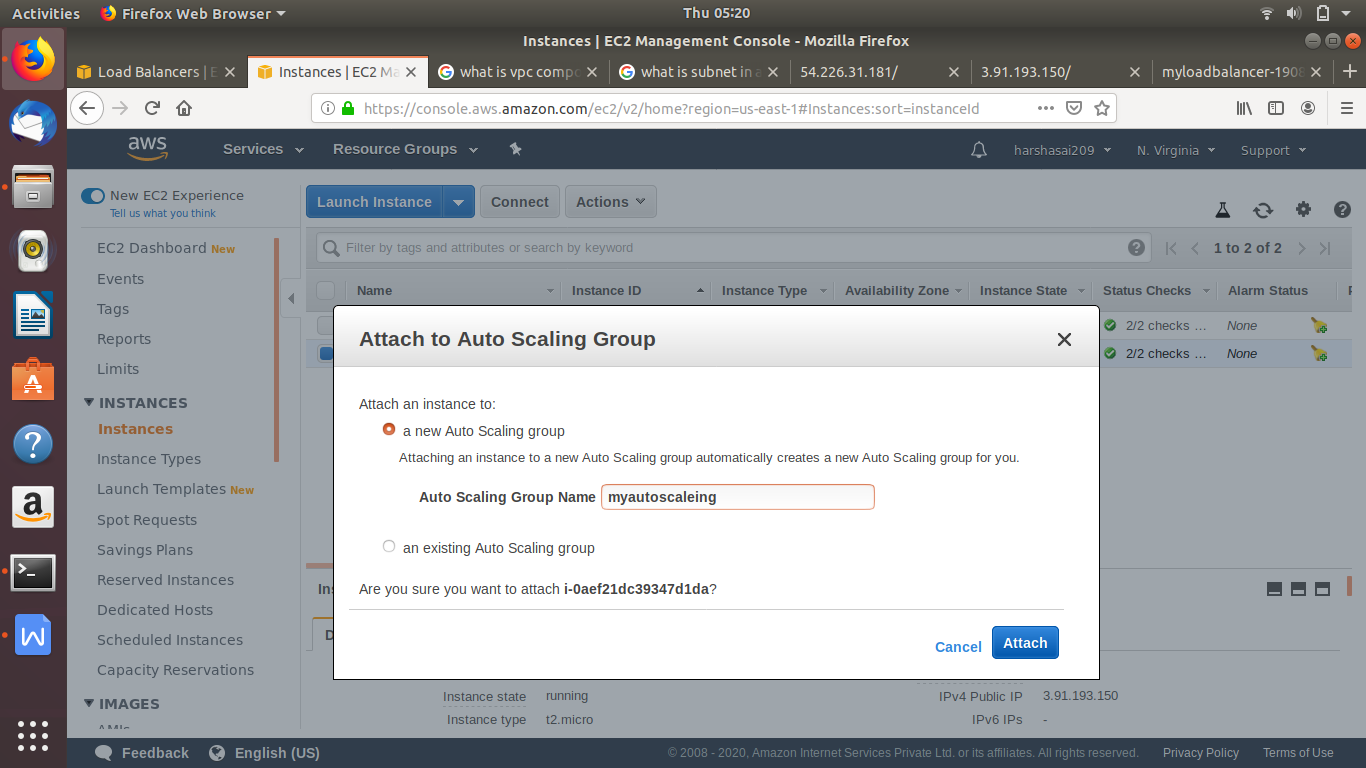
**Now output will be get from two instance when hitting that ip of load balance (wait for 3-4 mins)**

**Checked successfully**

**Now creating Auto scaling for above these instances**

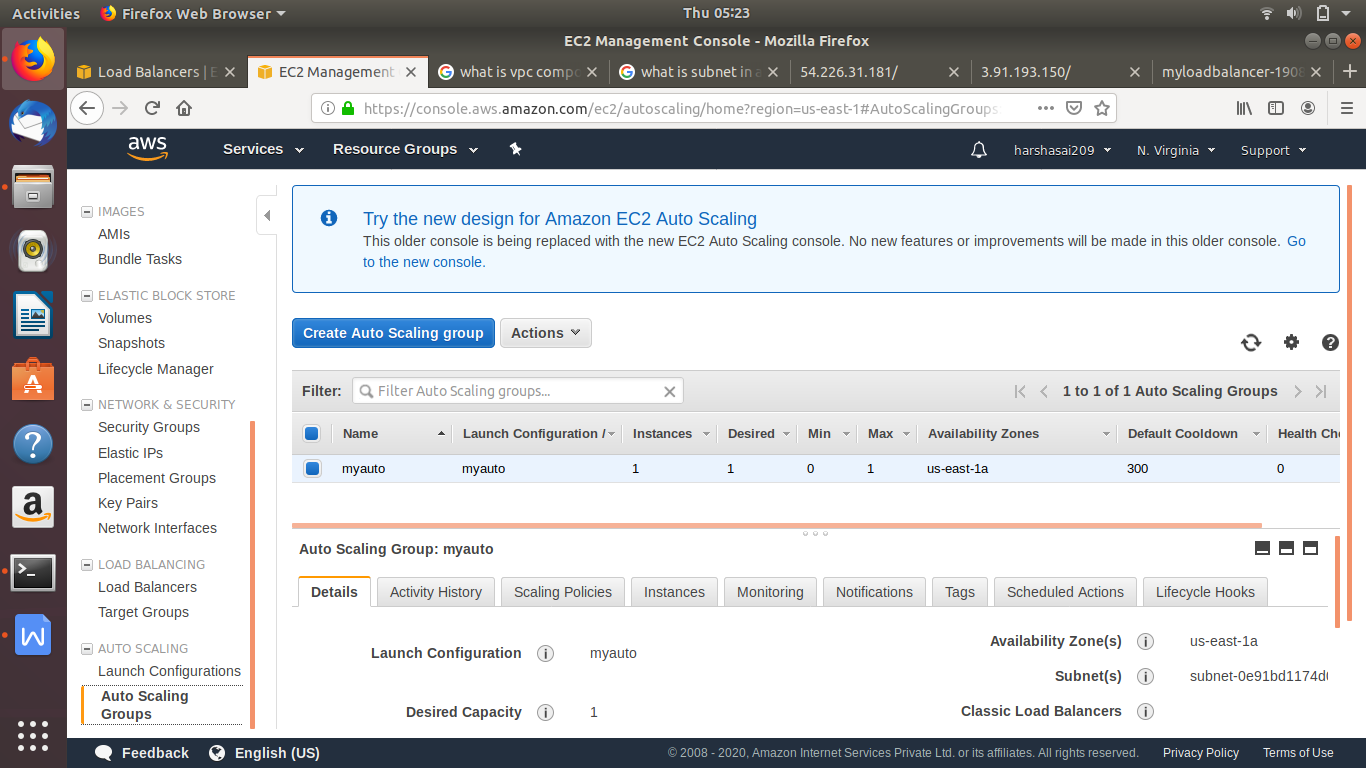
**Go to instance attaching those instance to autoscaling**

****

**Now attaching instance to new auto scaling **

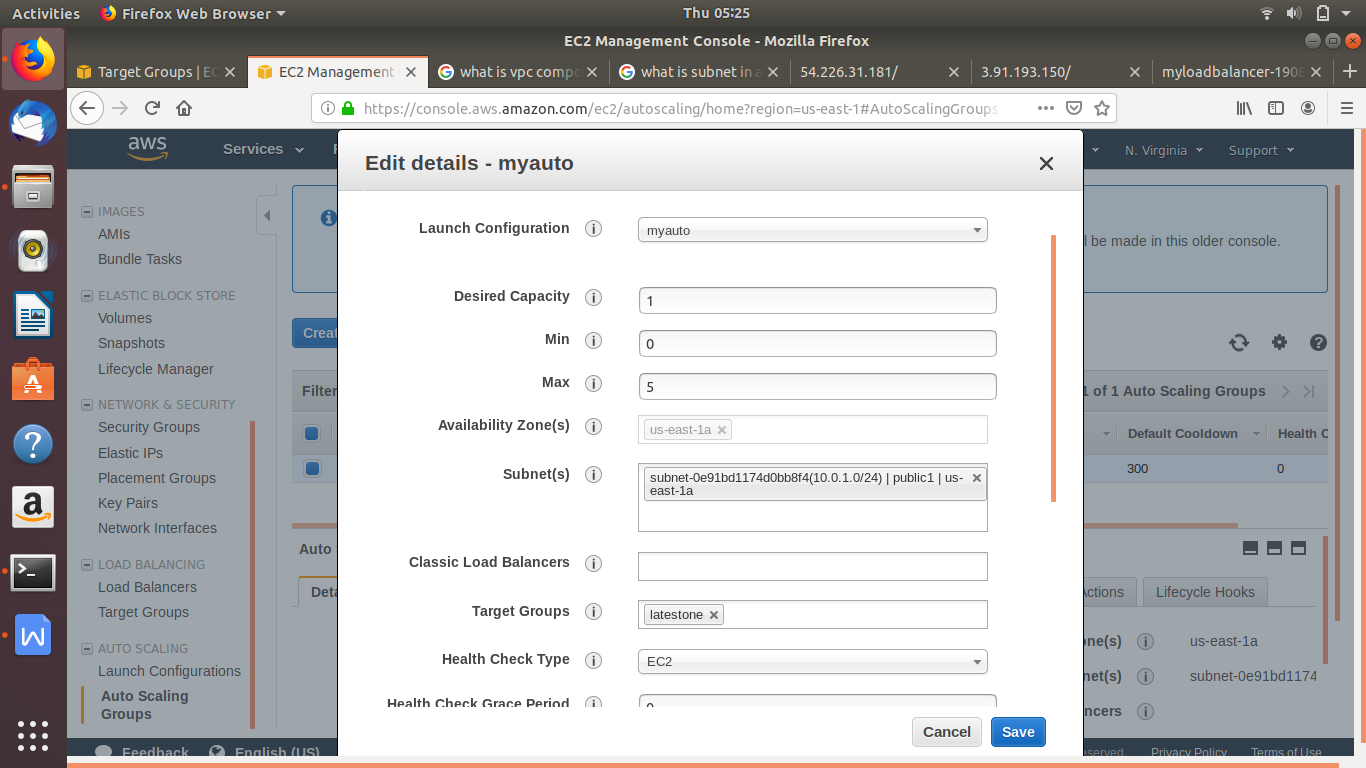
**Now to auto scaling created group change maximum limit of instance**

**Go to auto scaling group change the maximum size**

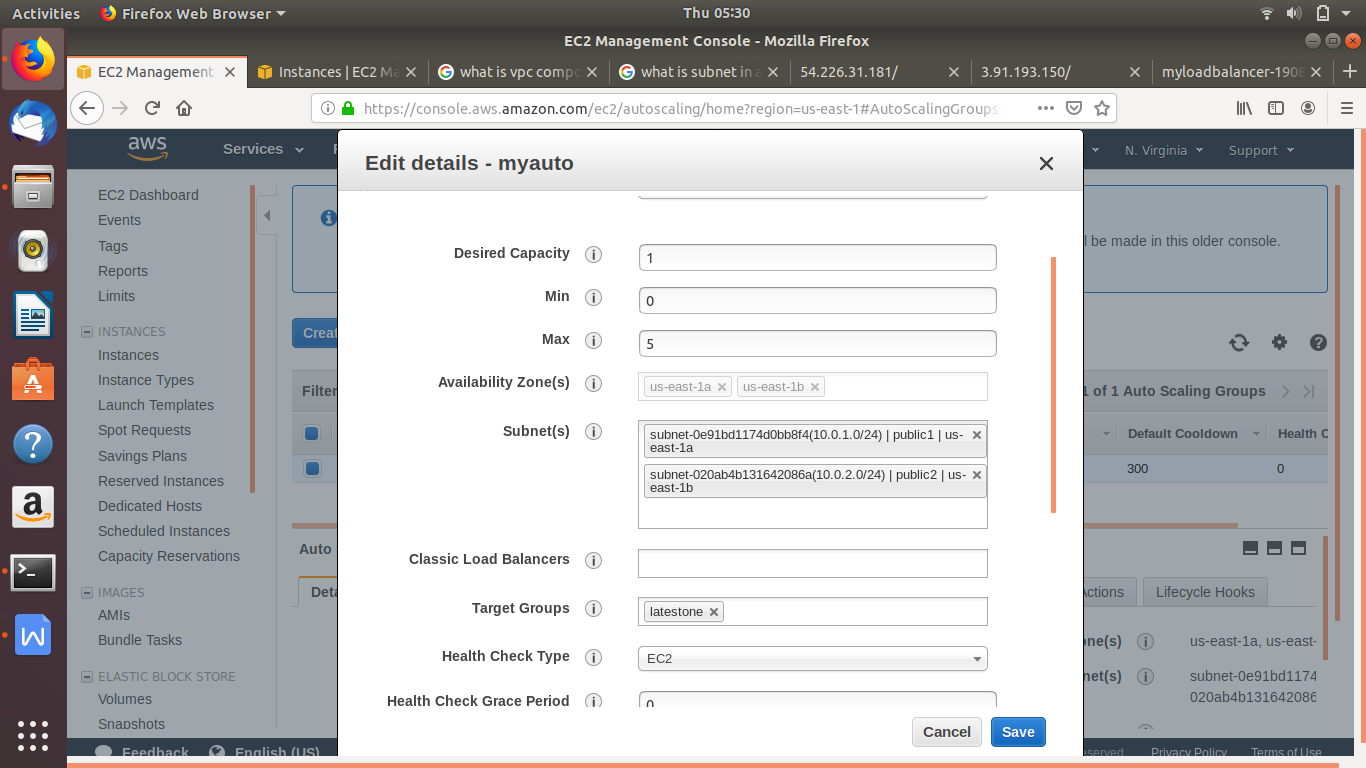
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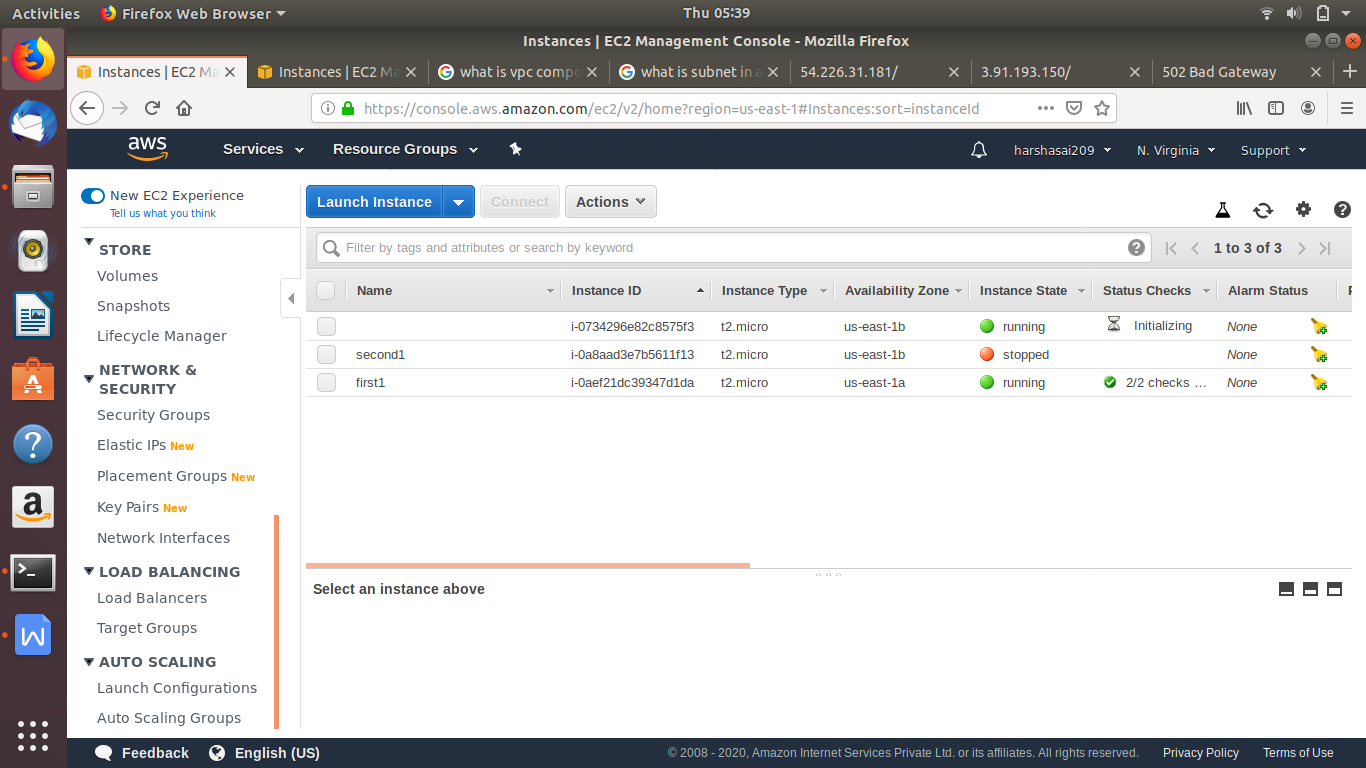
**Change to limit 4 -5 according required**

**And also give the name of load balance group name**

****

**Adding two subnets also for attaching instance it says one instance is occupied with one availblity zone so we need two availblity zone**

****

**Manually instance stopped and created instance **

**Created a new one**

**Checked it**

**Launch temple which is used to create a Ami**

**With respect required applications and services**