**Q1. When to use Elastic IP over Public IP**

Elastic IP is used when you are working on a long time project and configuration of IP sometimes consumes more time. Public IP is used when you are working **on** small projects and running 2-3 servers. Here in this situation you make use of IP for a short time.

**Q2. Valid IP Ranges for LAN, Implication of using Public IP ranges for Private Network.**

1.0.0.0 – 126.255.255.255 class A / 8

128.0.0.0 – 191.255.255.255 class B / 16

192.0.0.0 – 223.255.255.255 class C / 24

**Implication of using Public IP ranges for Private Network.**

Class A 10.0.0.0 – 10.255.255.255

Class B 172.16.0.0 – 172.31.255.255

Class c 192.168.0.0 – 192.168.255.255

**Q3. List down the things to keep in mind while VPC peering.**

Peering Connections are available only between VPC in the same region.

Provided the owner of other VPCs accepts your connection we canconnect VPC with a VPC owned by another AWS account

**Q4. CIDR of a VPC is** [**10.0.0.0/16**](http://10.0.0.0/16)**, if the subnet mask is /20 calculate the number of subnets that could be created from the VPC. Also find the number of IP in the subnet.**

16 subnets are possible with /20 .

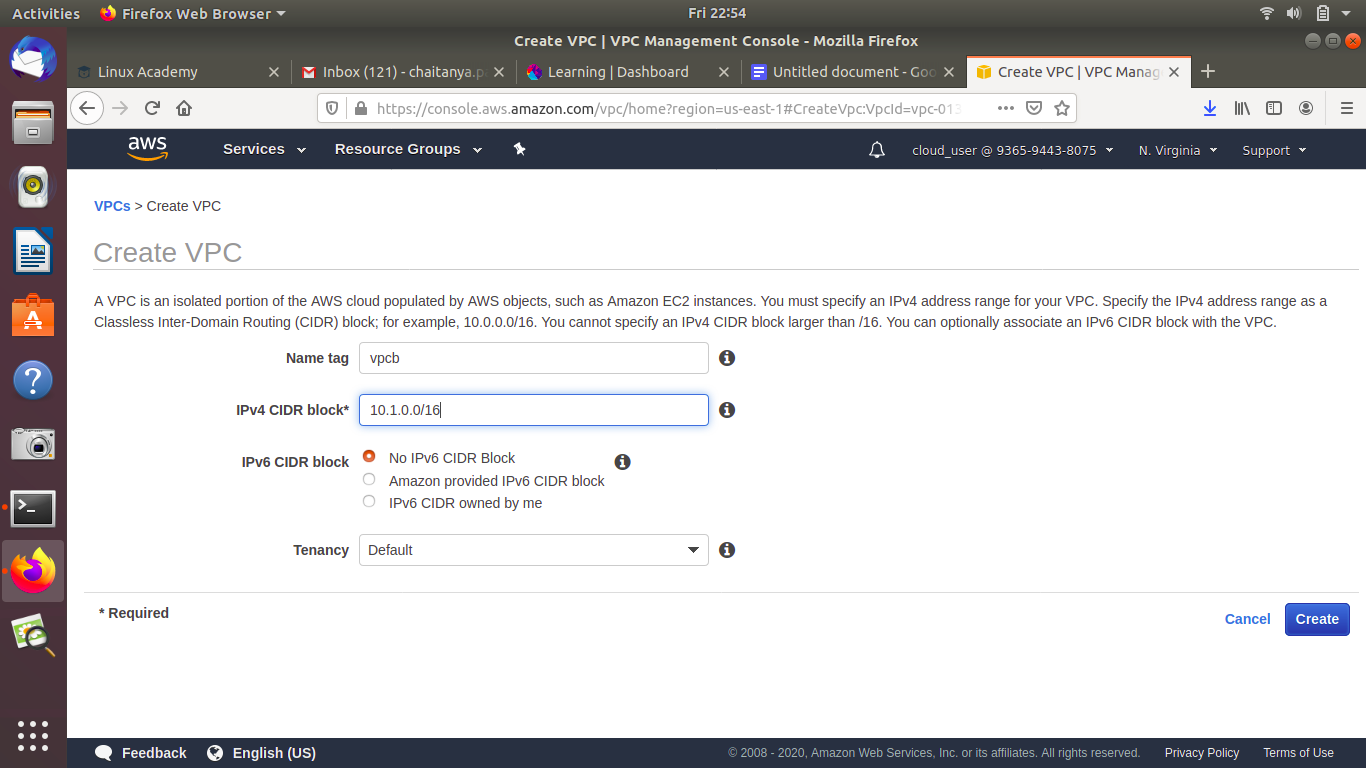
4096 IP’S are possible .

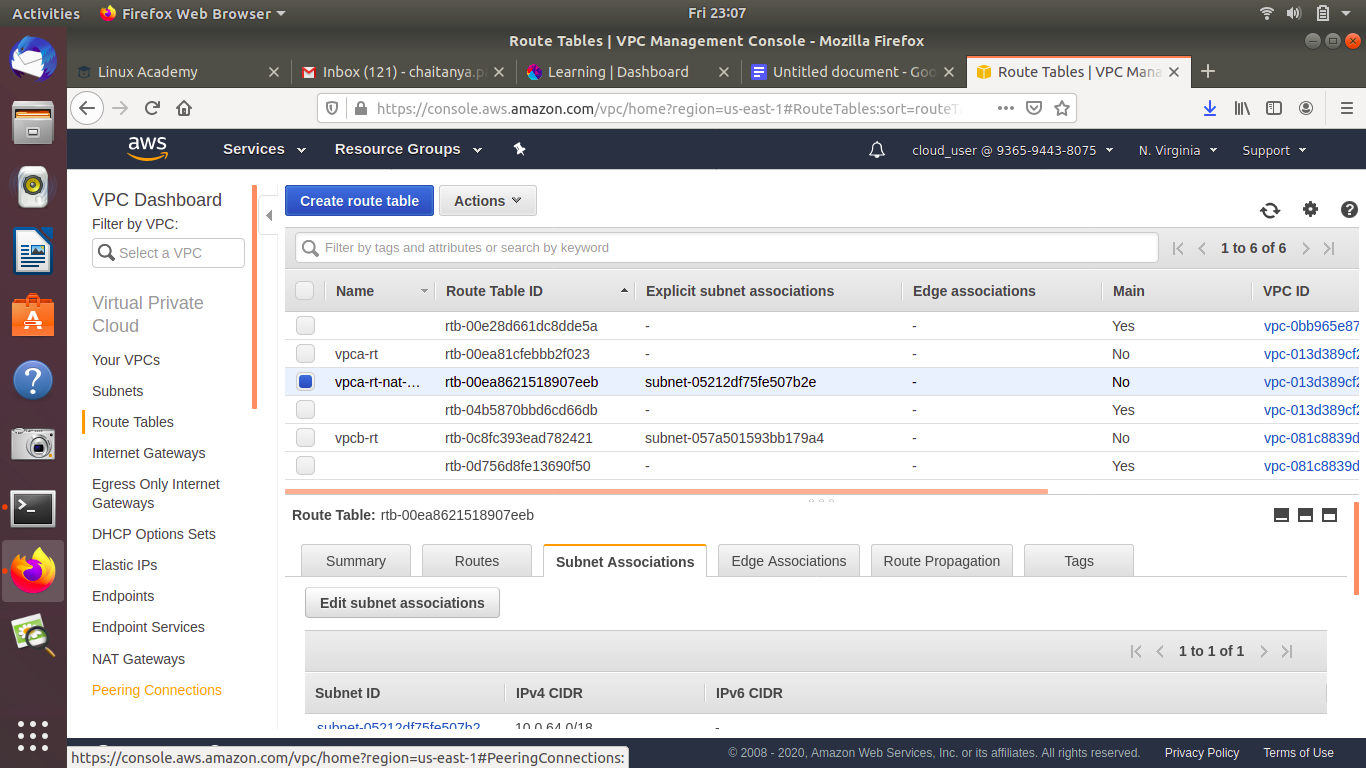
**Q5. Differentiate between NACL and Security Groups.**

Security groups are tied to an instance whereas Network ACLs are tied to the subnet. i.e. Network Access control lists are applicable at the subnet level, so any instance in the subnet with an associated NACL will follow rules of NACL**.**This means any instances within the subnet group gets the rule applied.

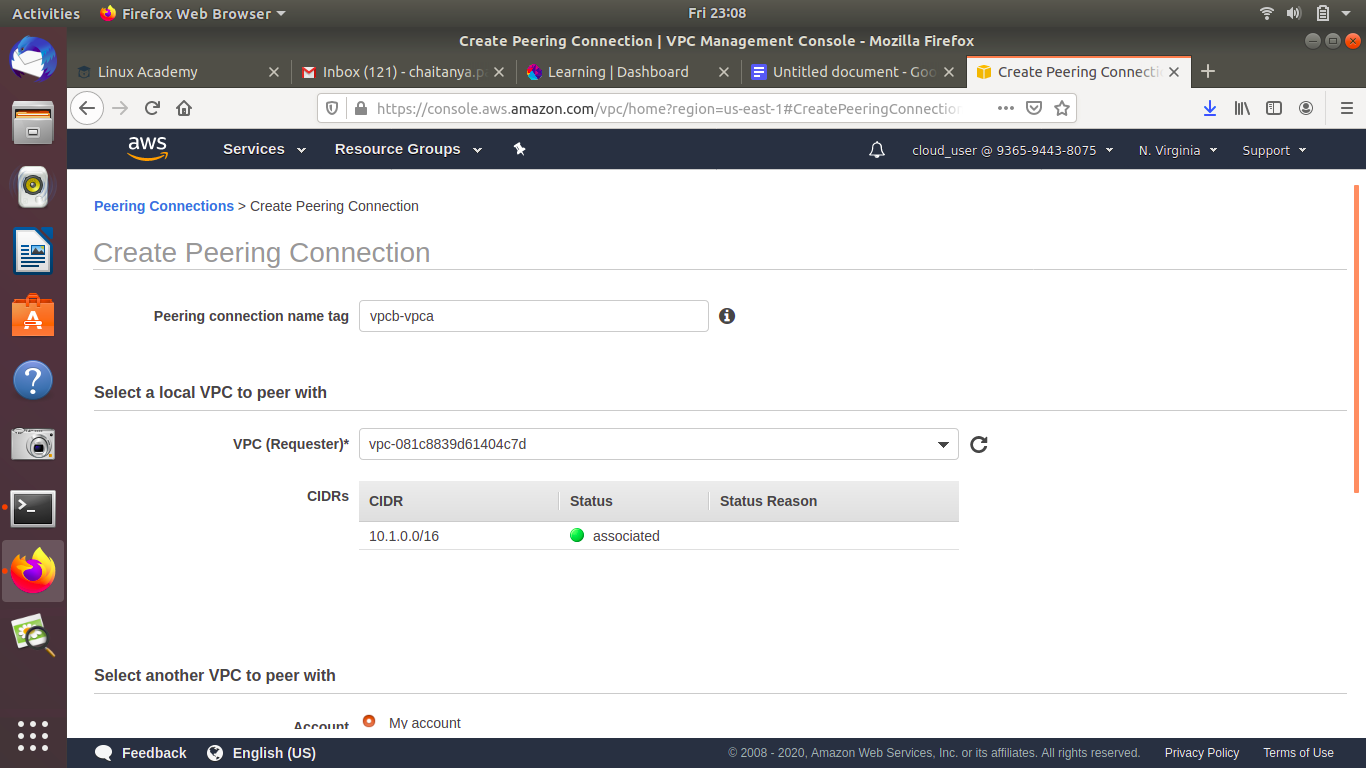
**Q6. Implement a 2-tier vpc with following requirements:**

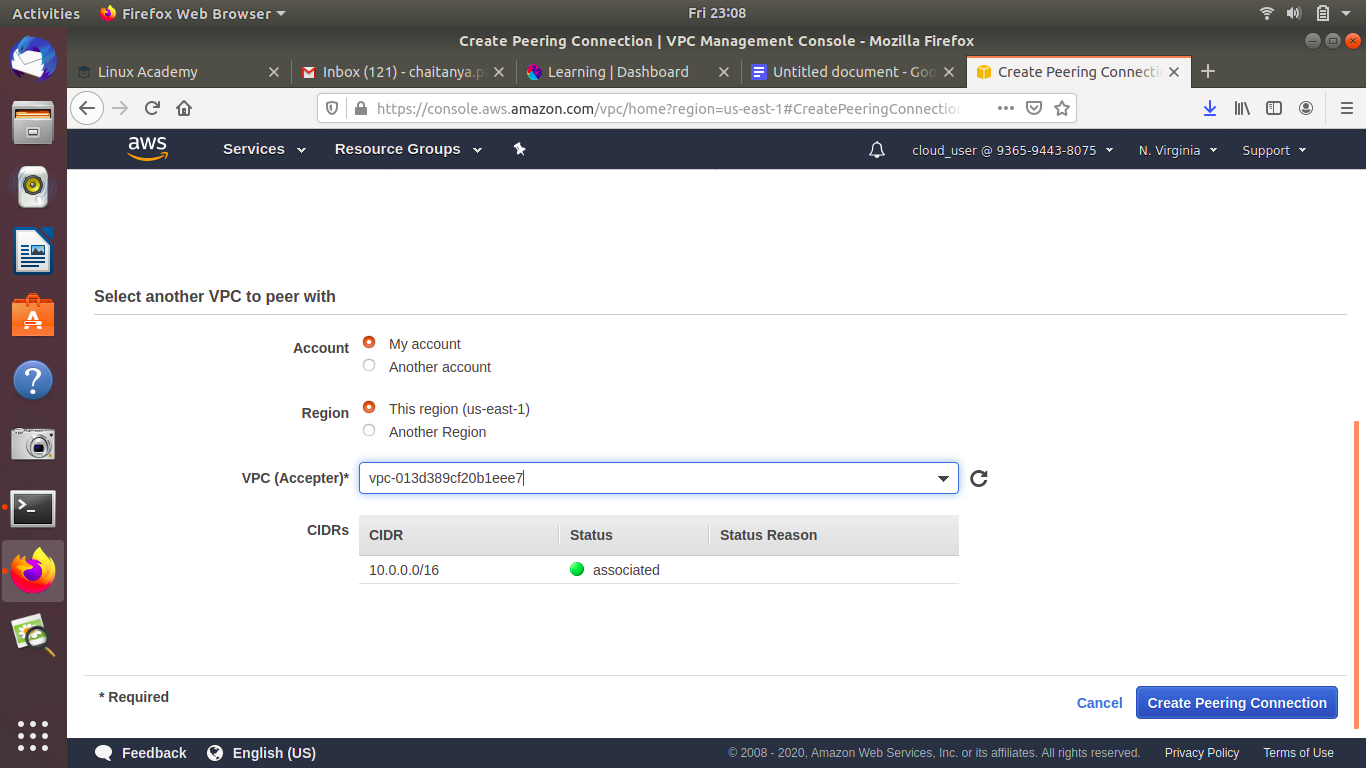
**1. Create a private subnet, attach NAT, and host an application server(Tomcat)**

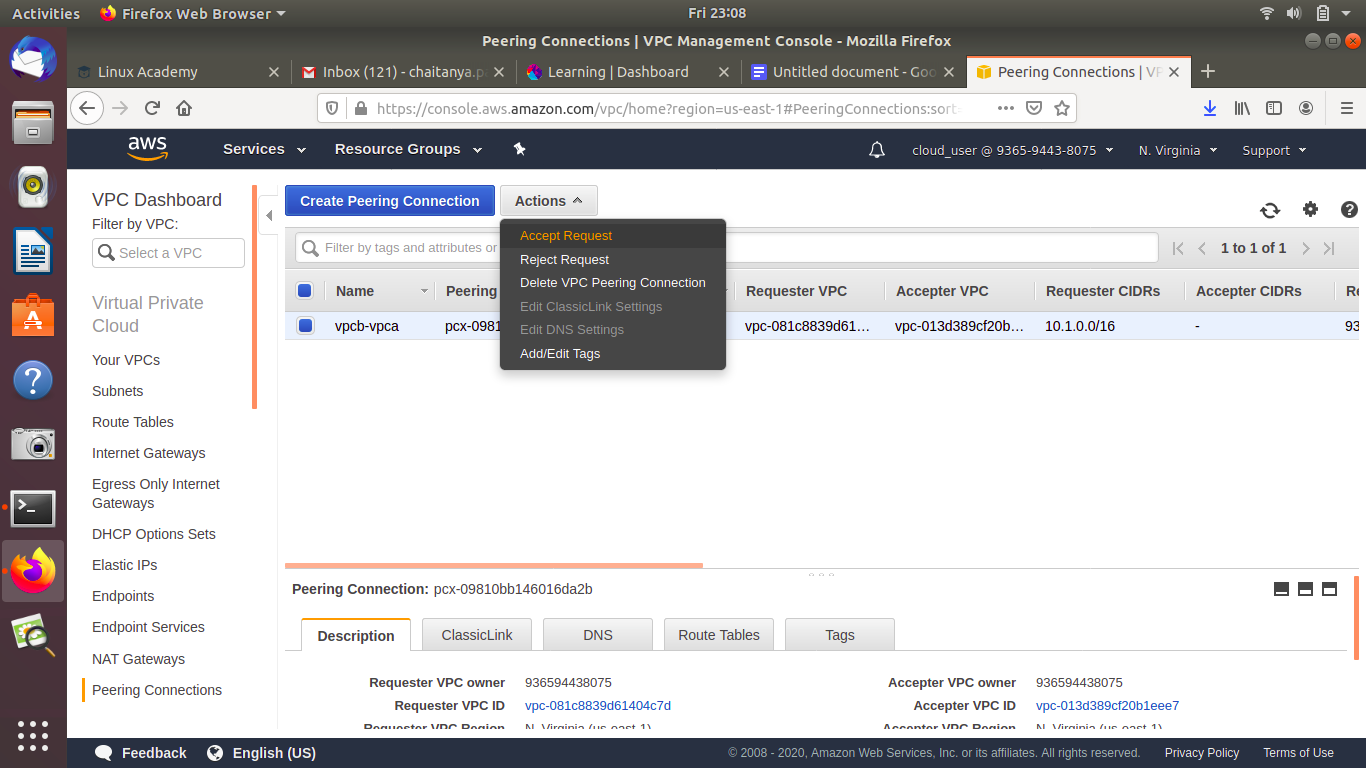
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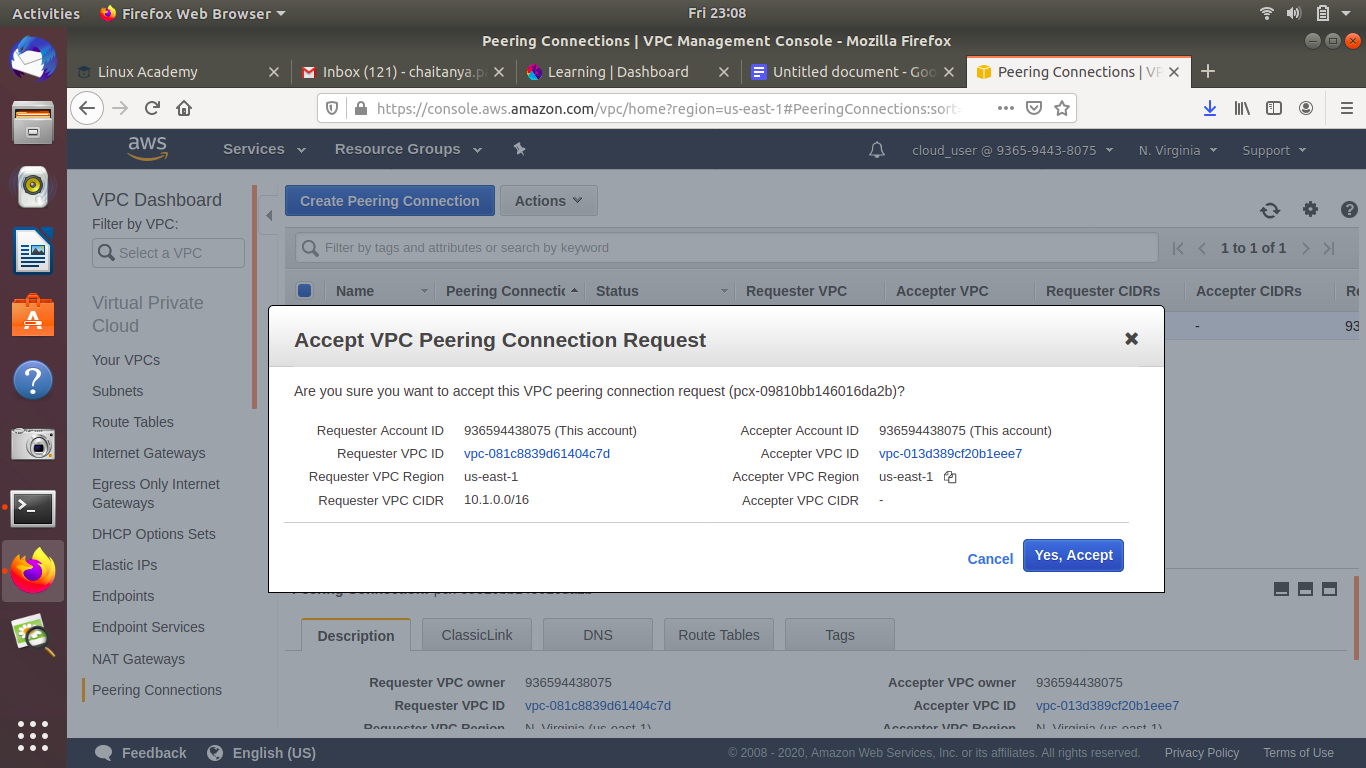
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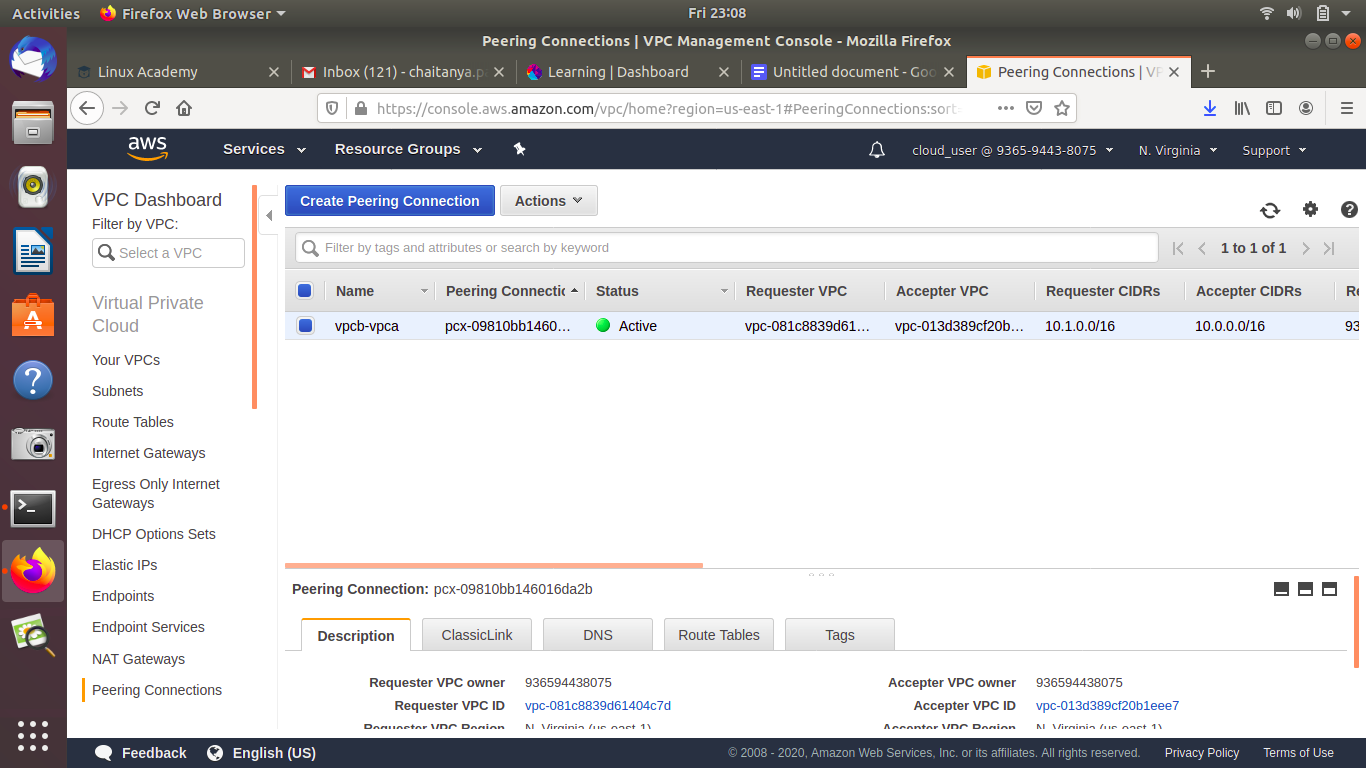
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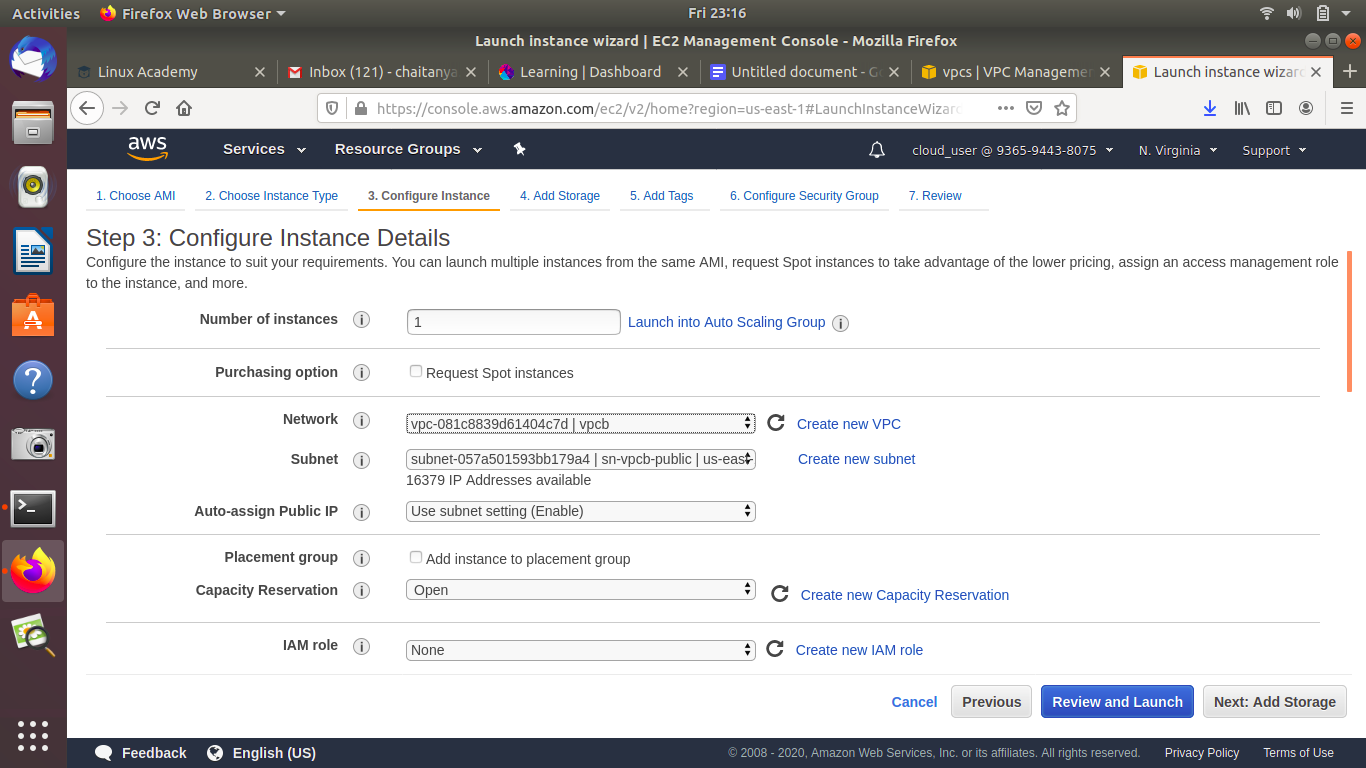
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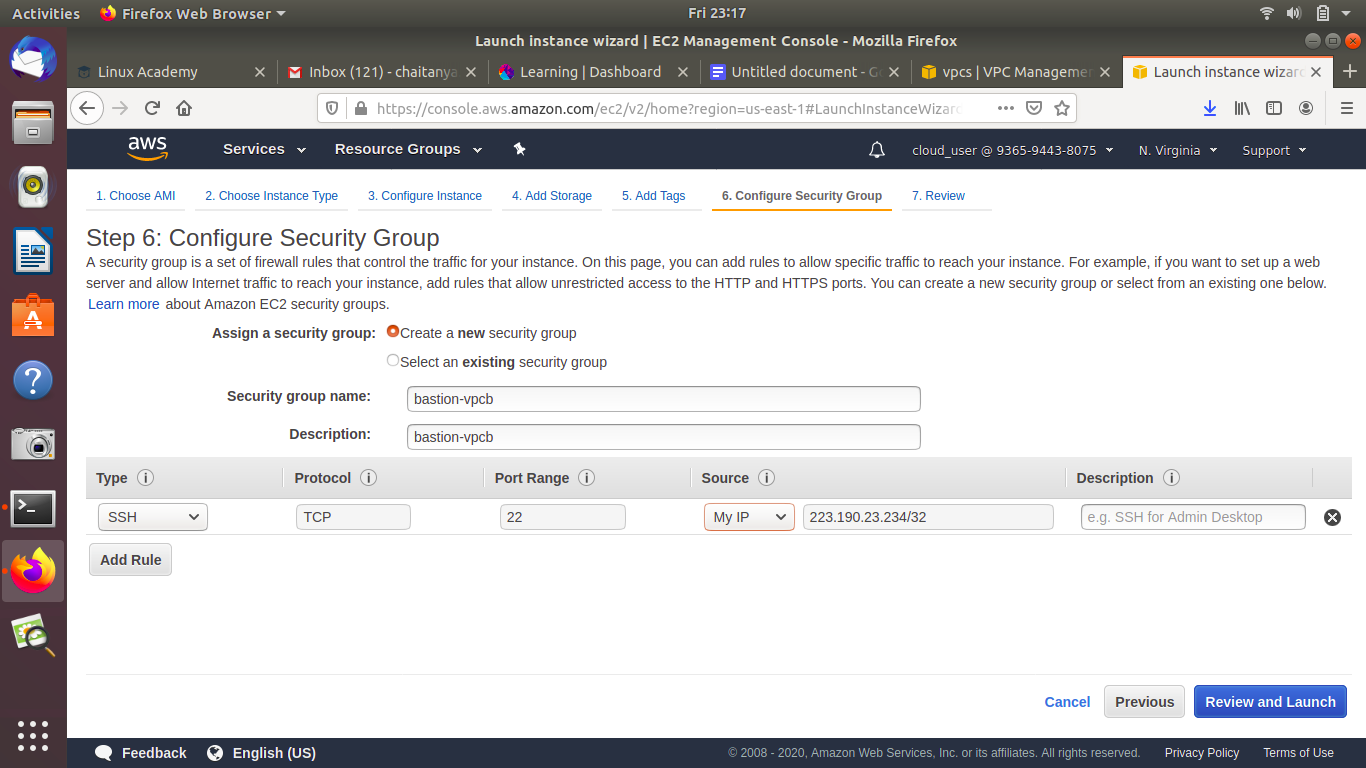
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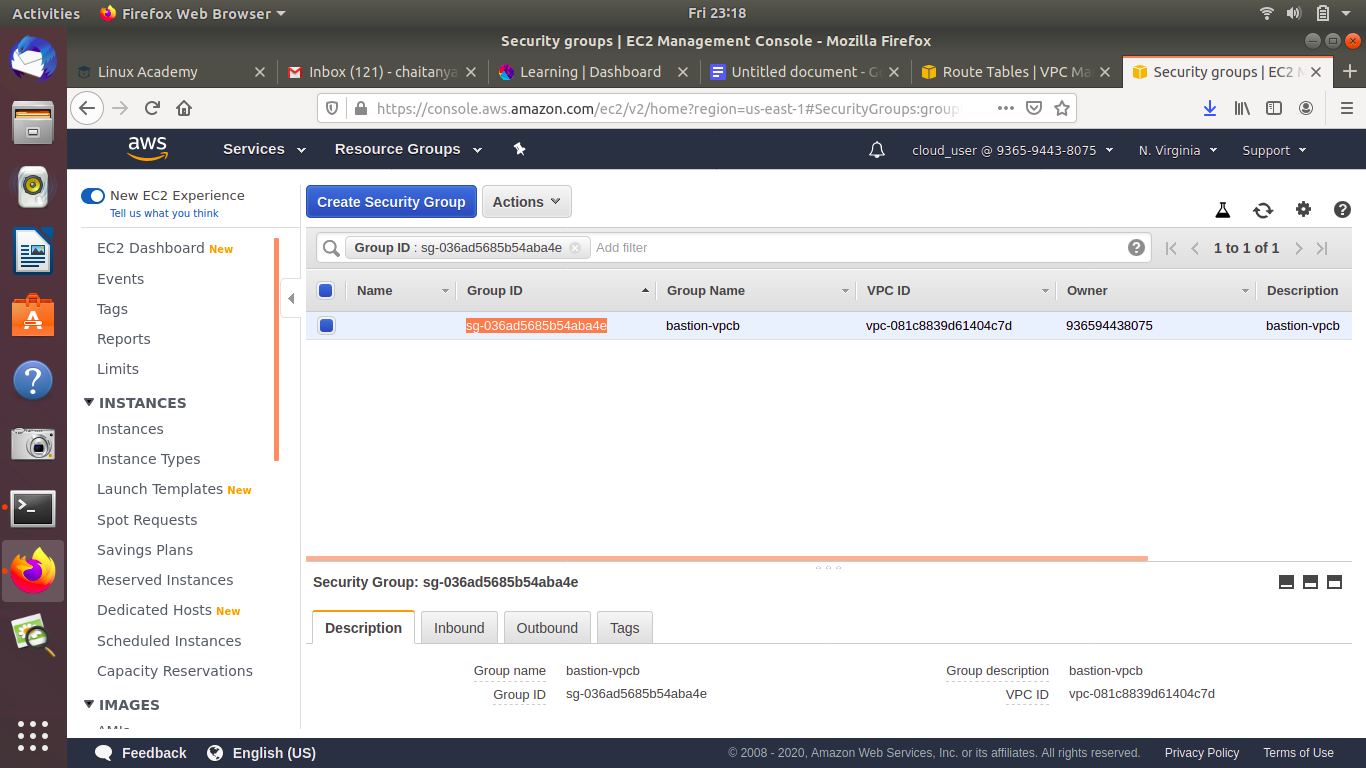
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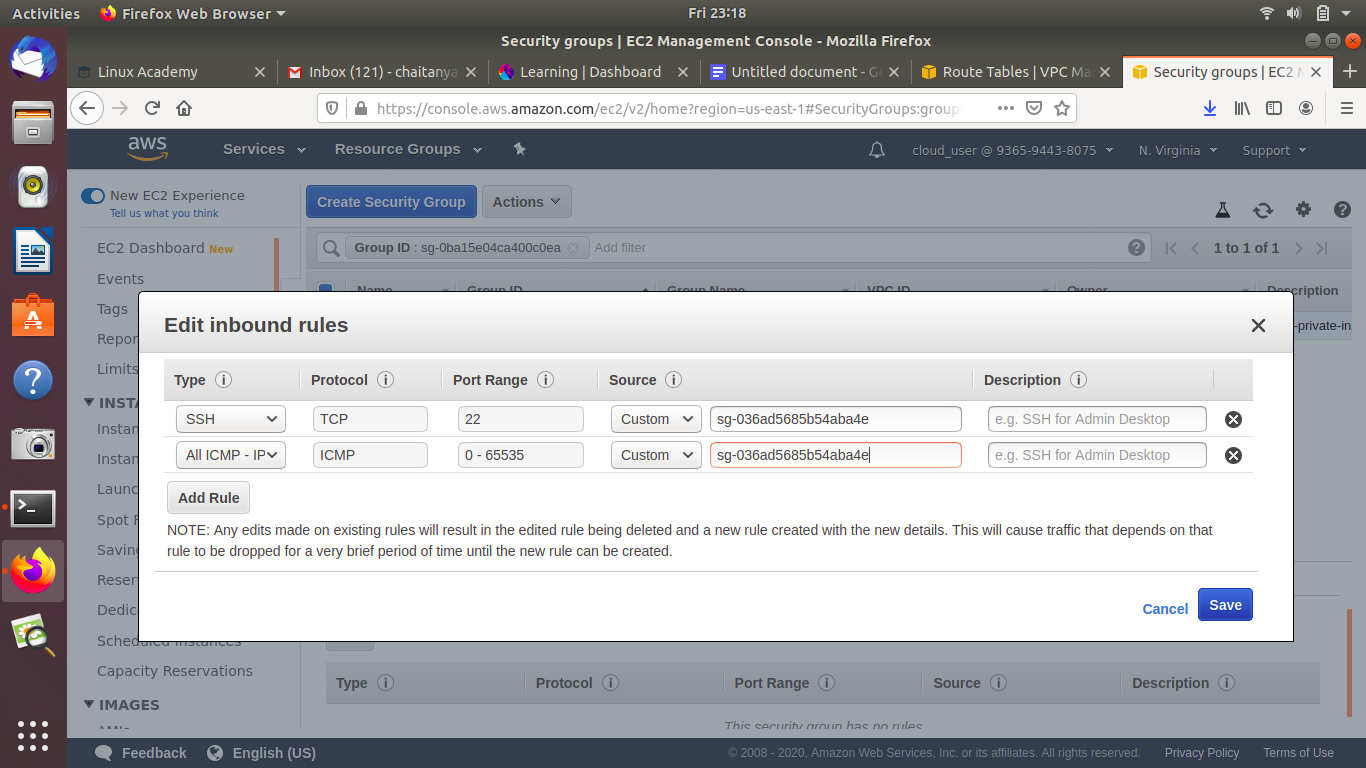
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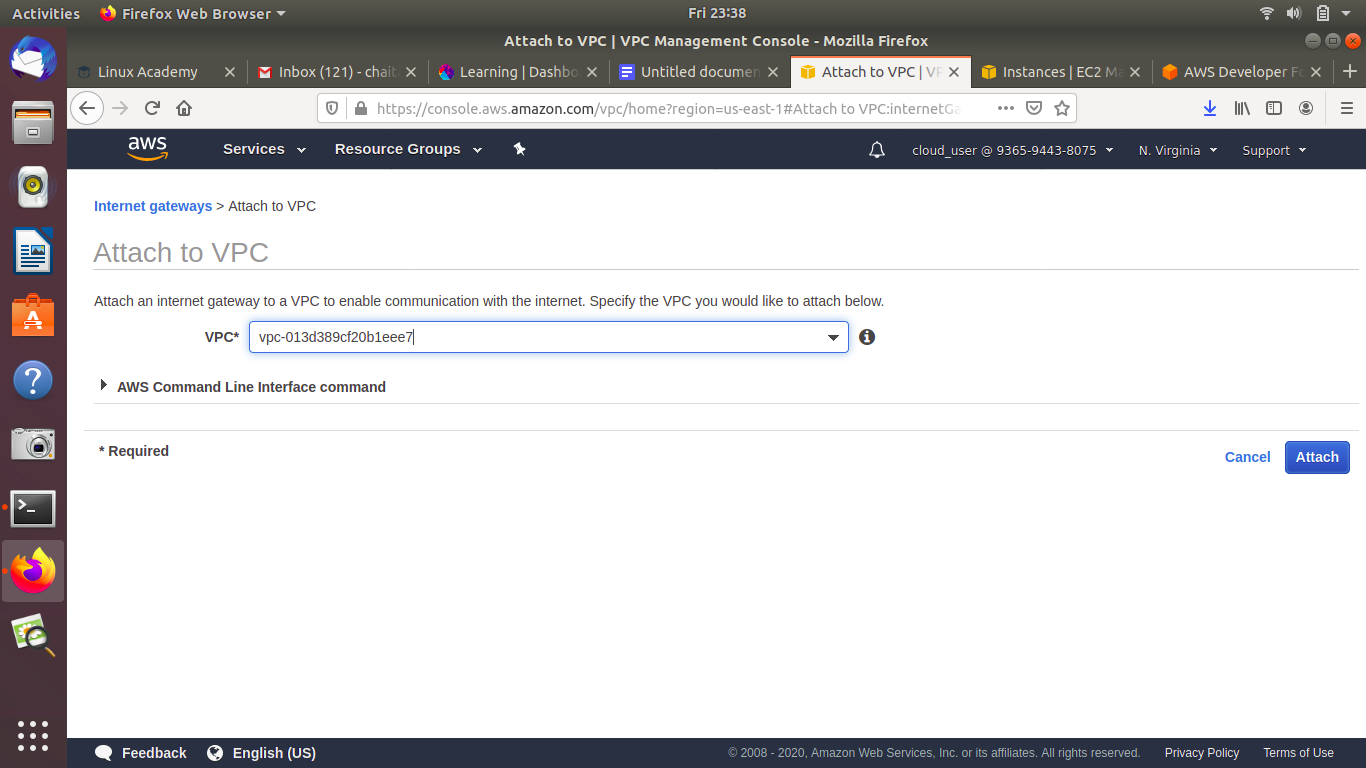
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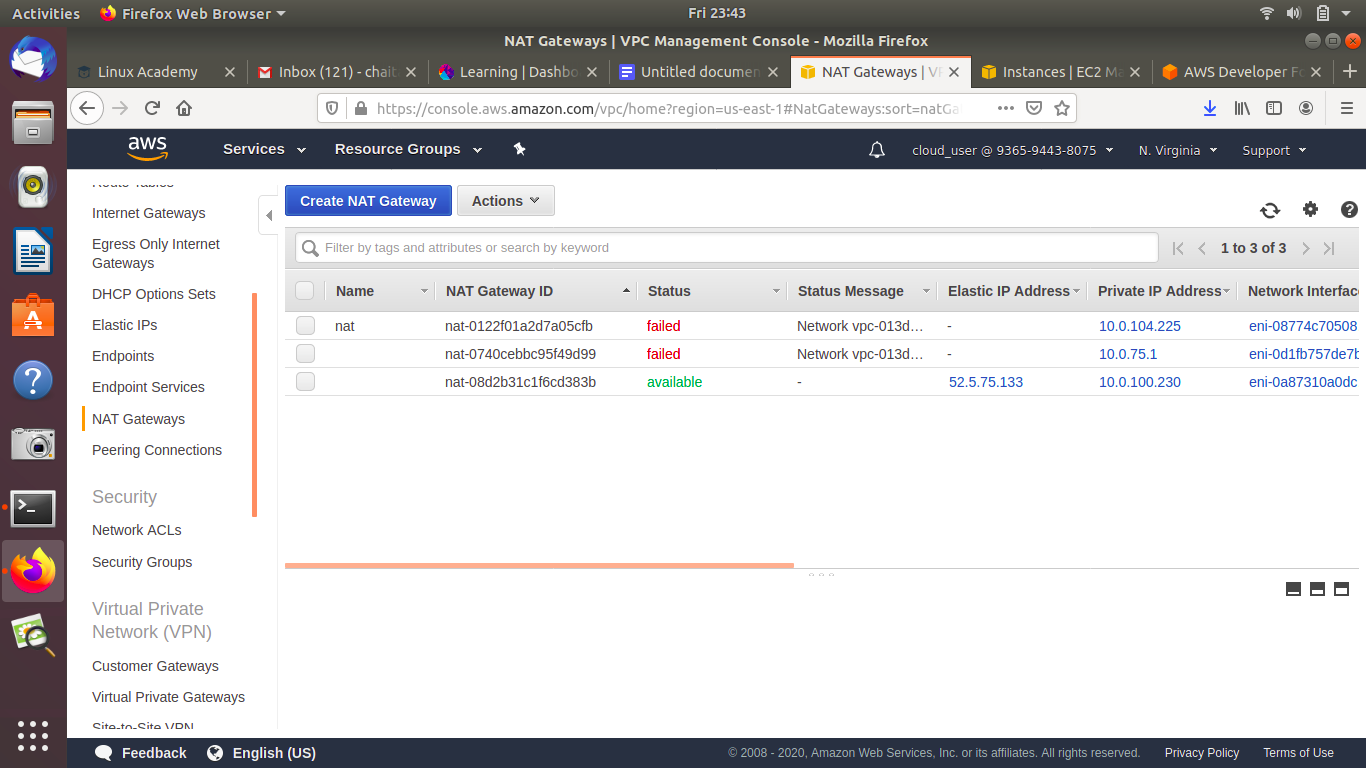
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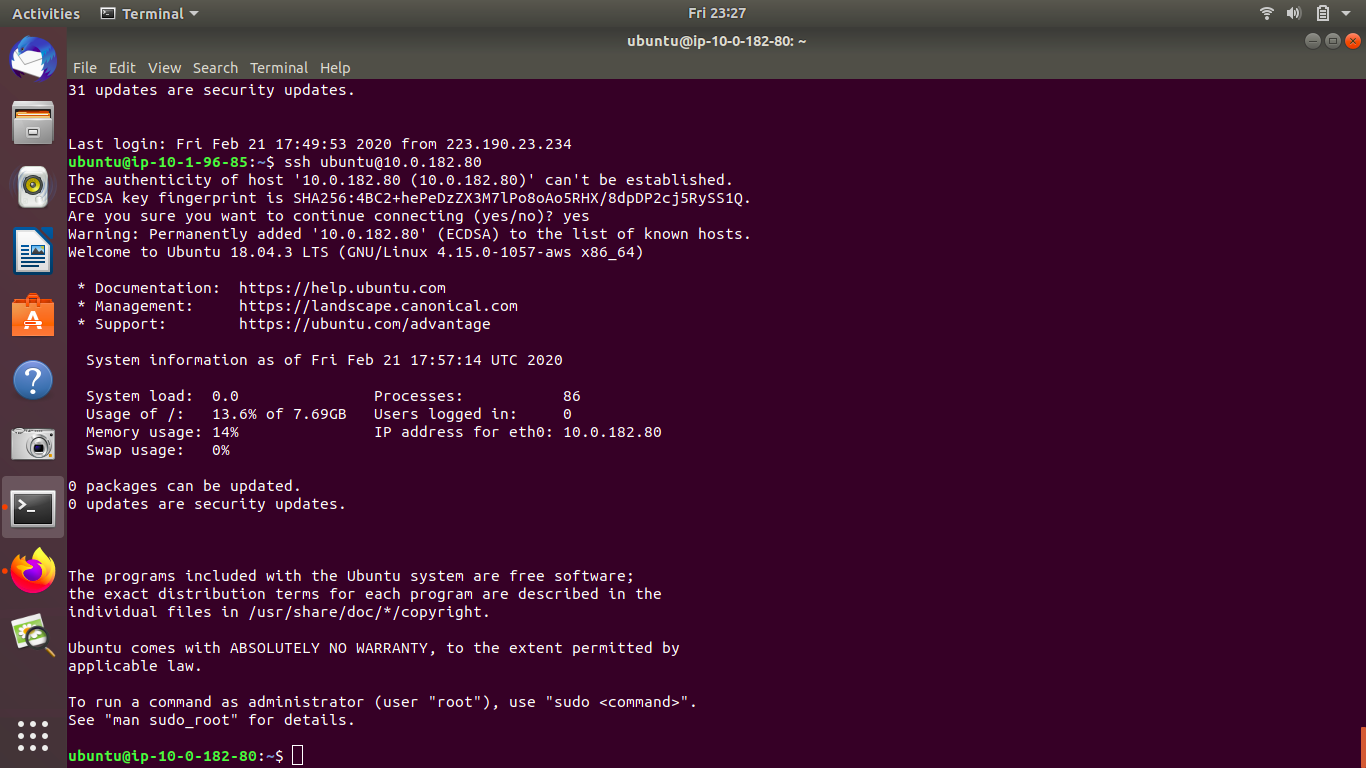
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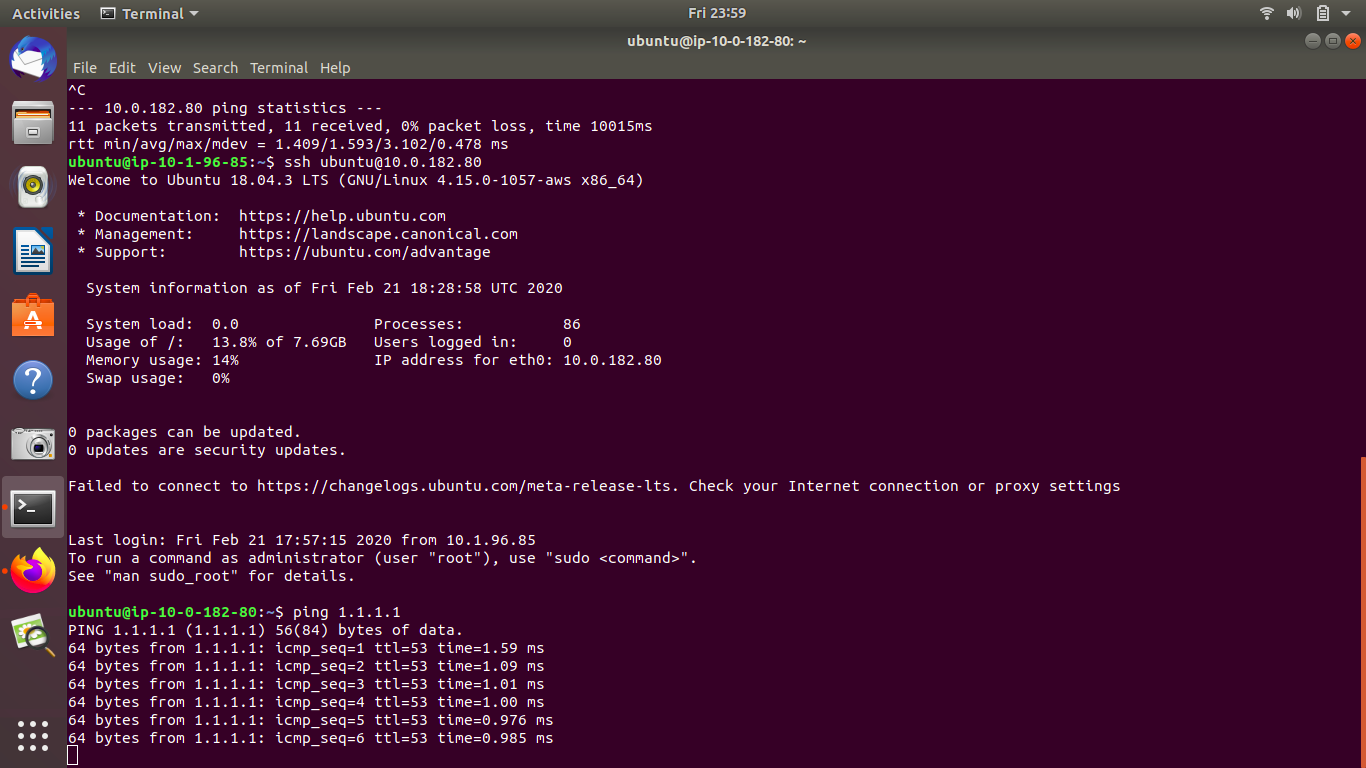
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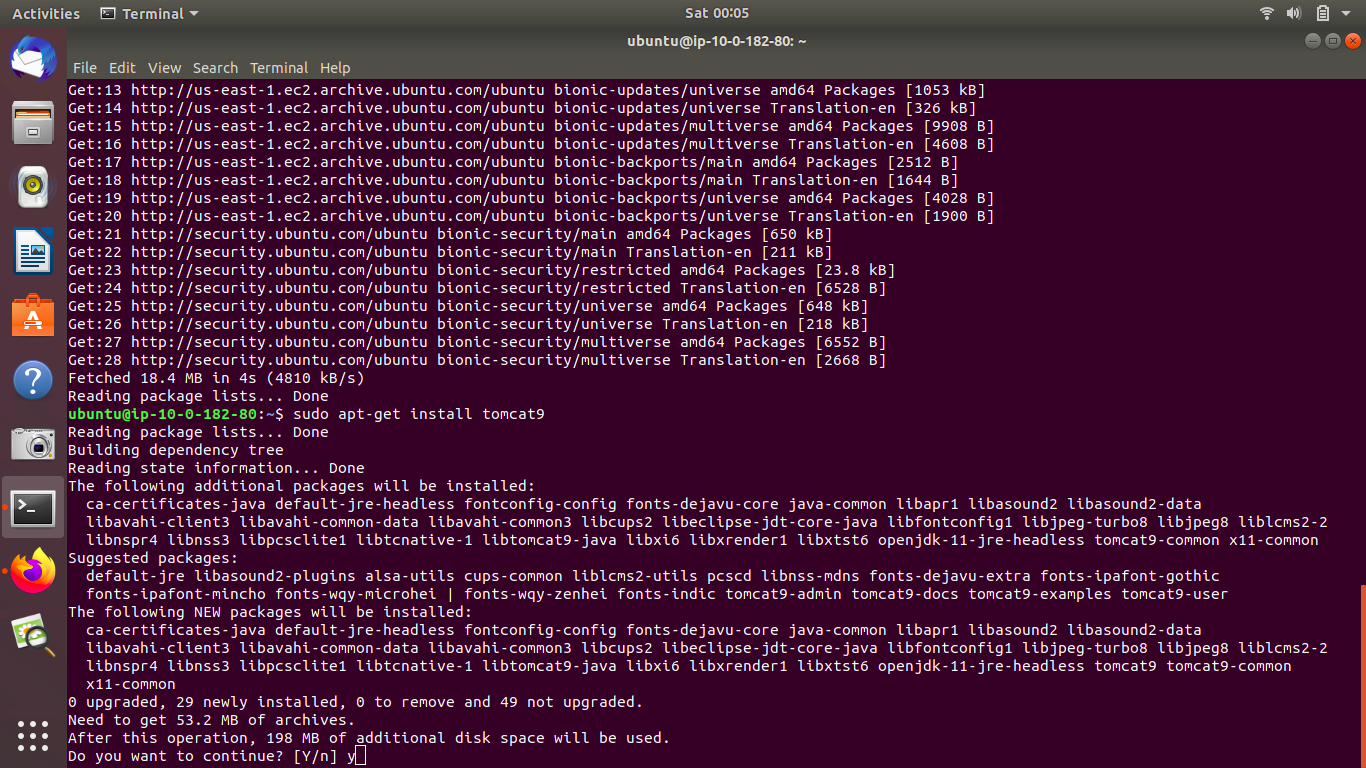
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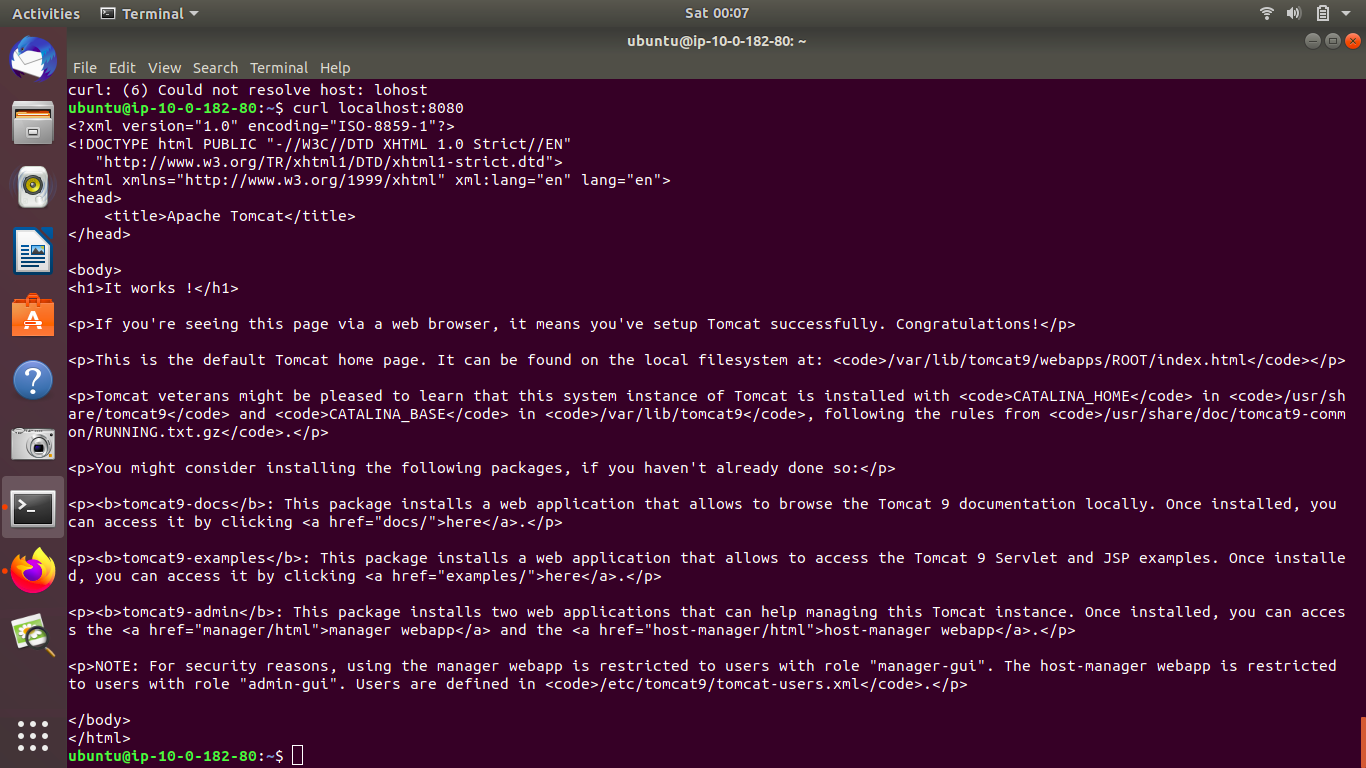
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