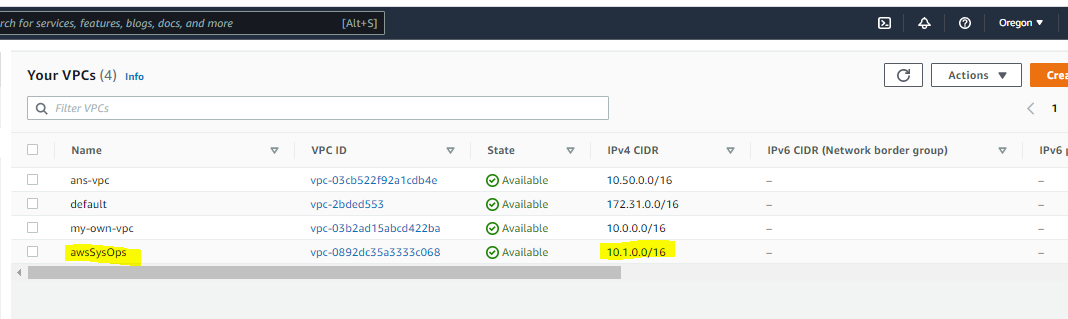
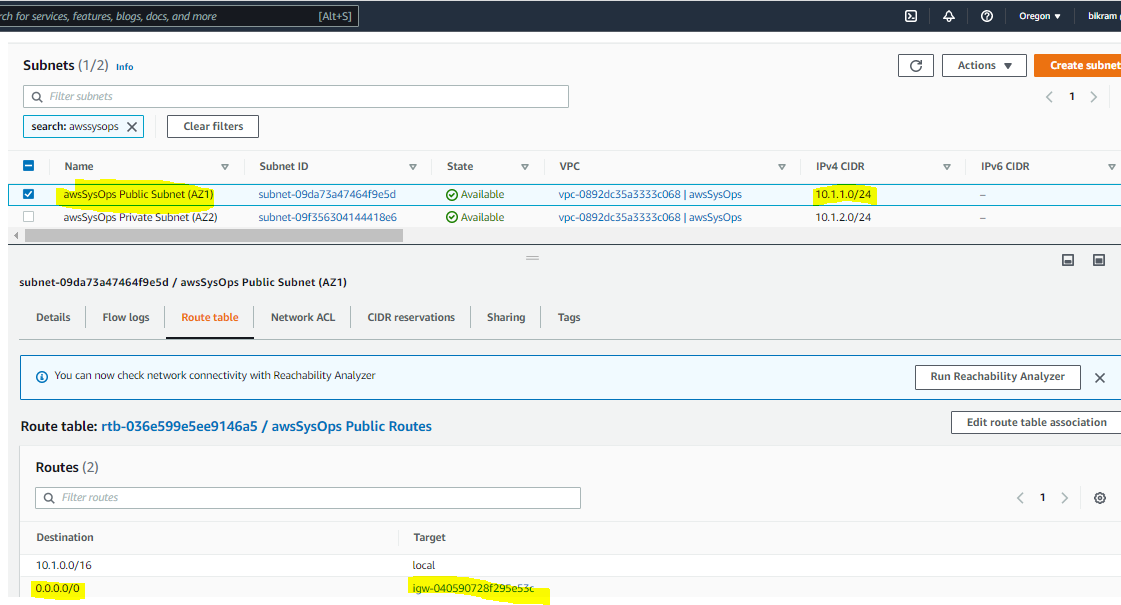
AwsSysOps-2A Batch project

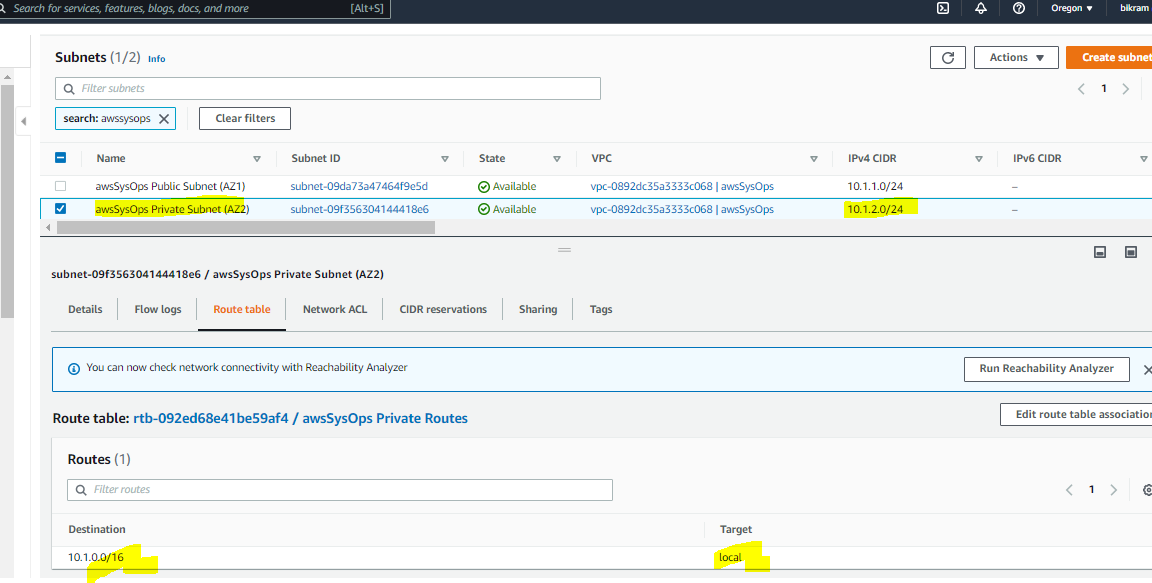
Part-1

1. Cloudformation Task :

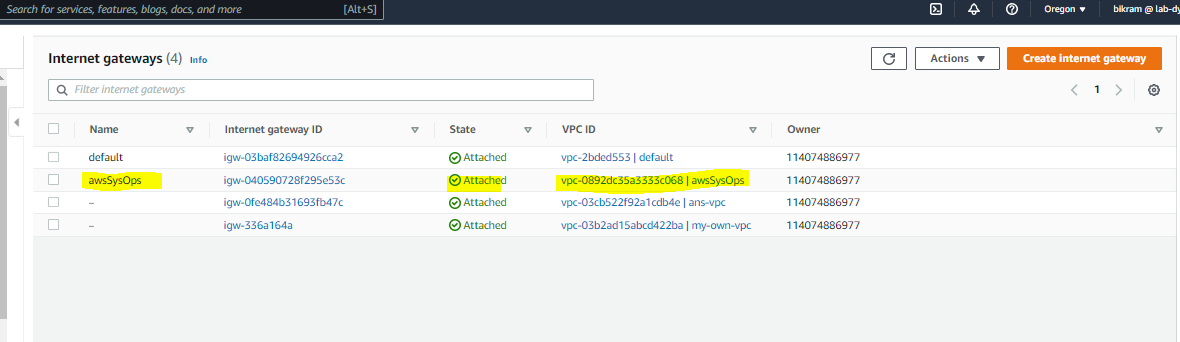
create a vpc with one public and one priv subnet ( 10.1.0.0/16 , 10.1.1.0/24 (public) , 10.1.2.0/24(priv)



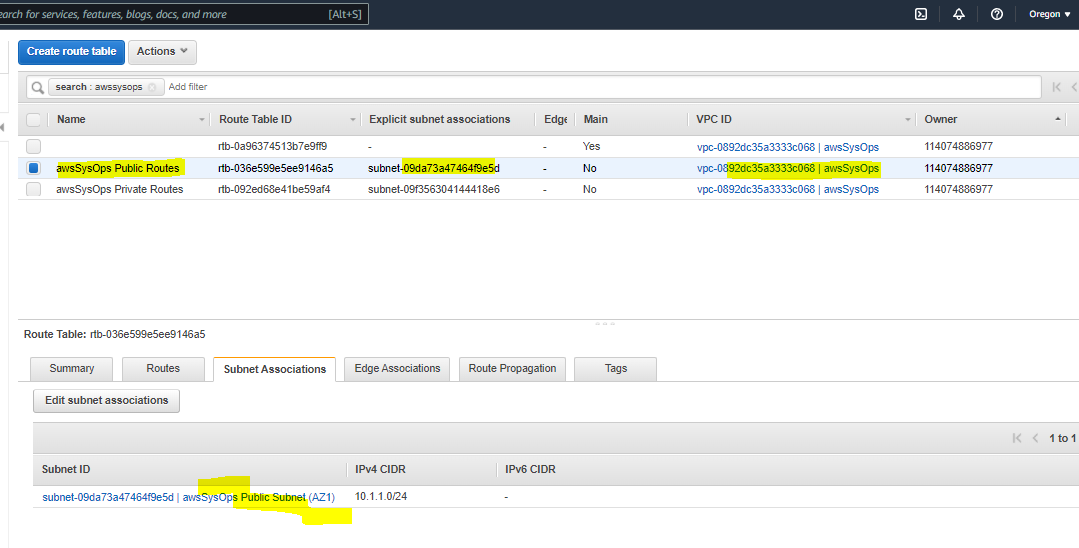


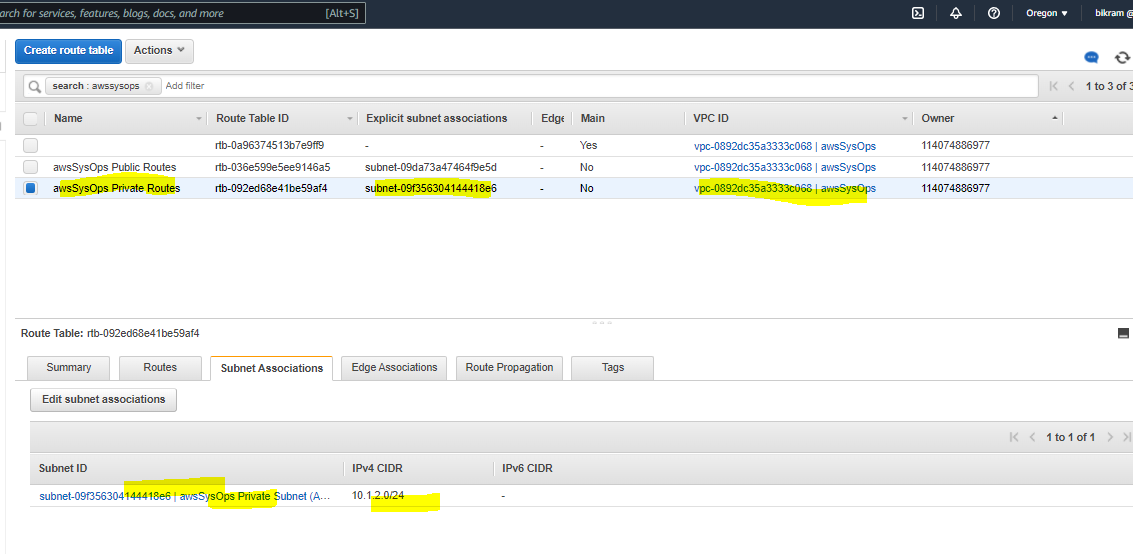


Create IGW and attach to vpc



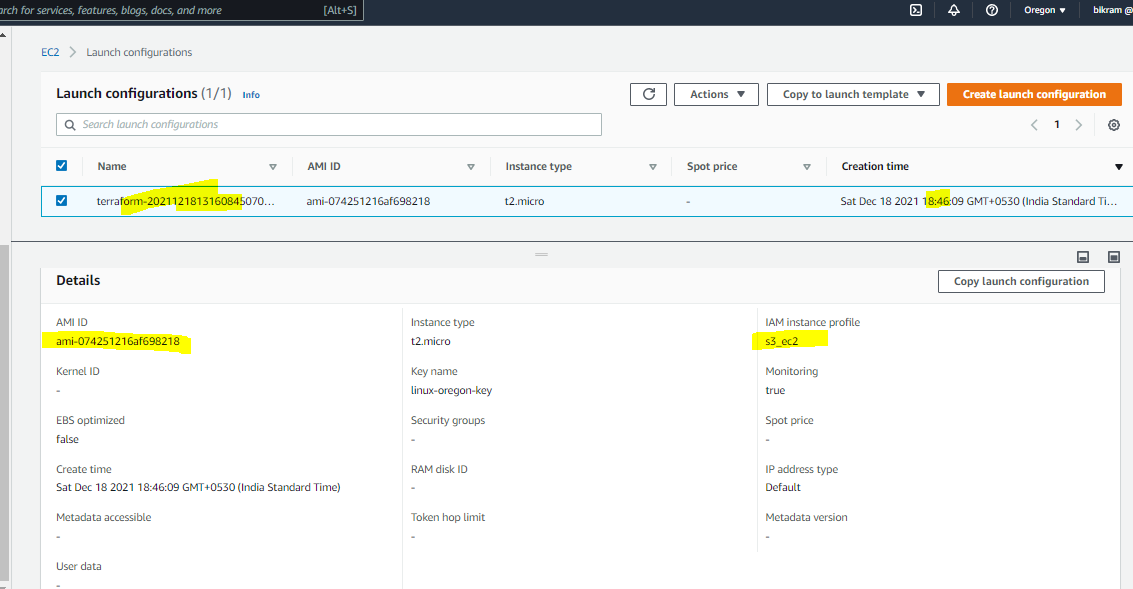
Routetables



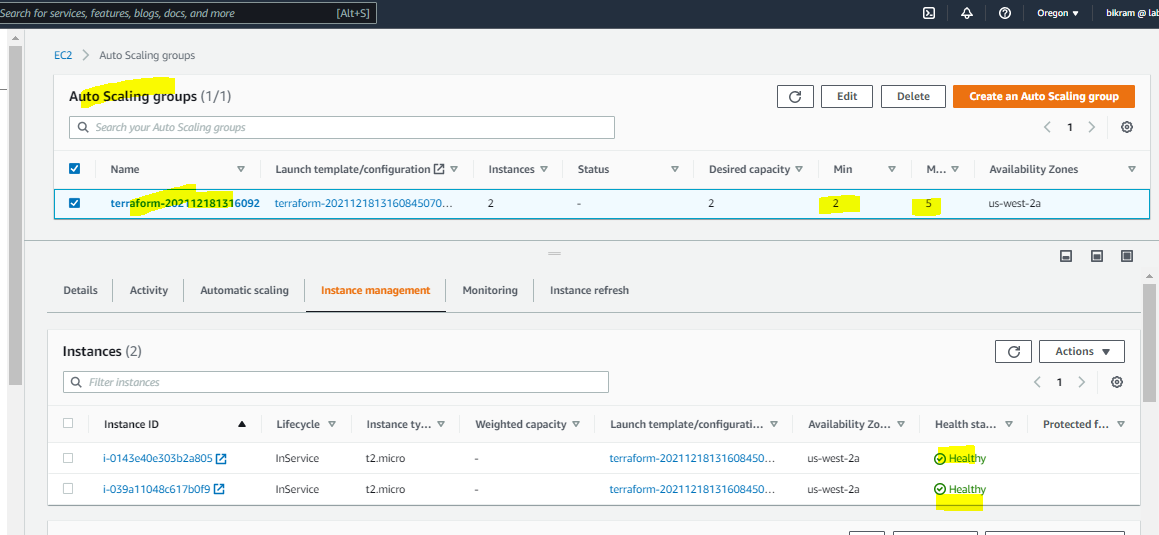


1. Terraform task:

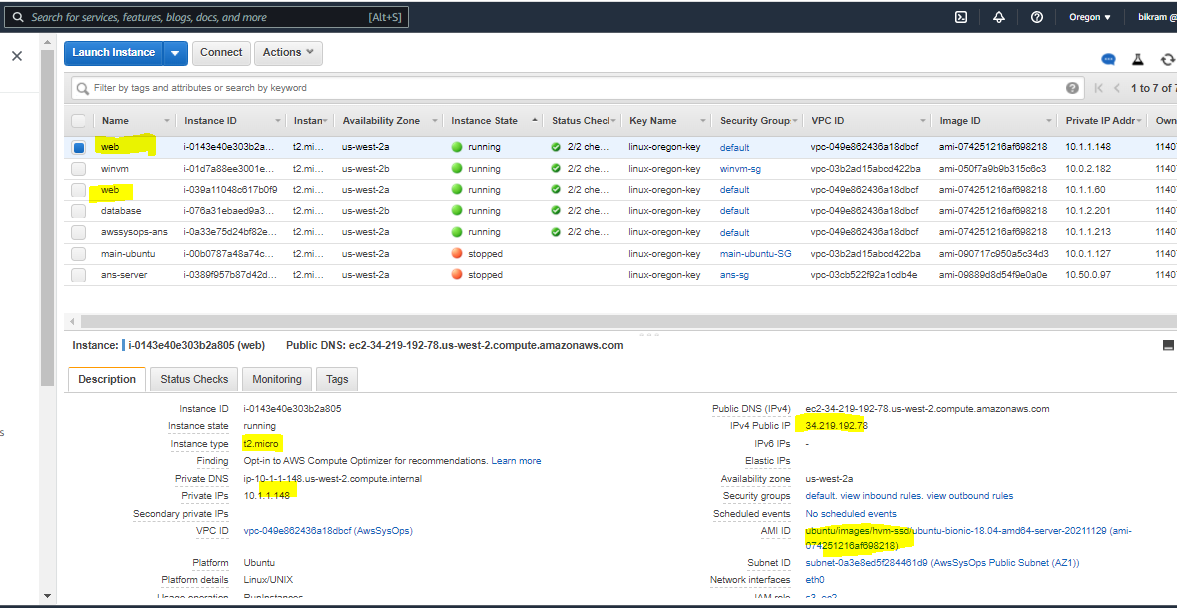
Launch Configuration



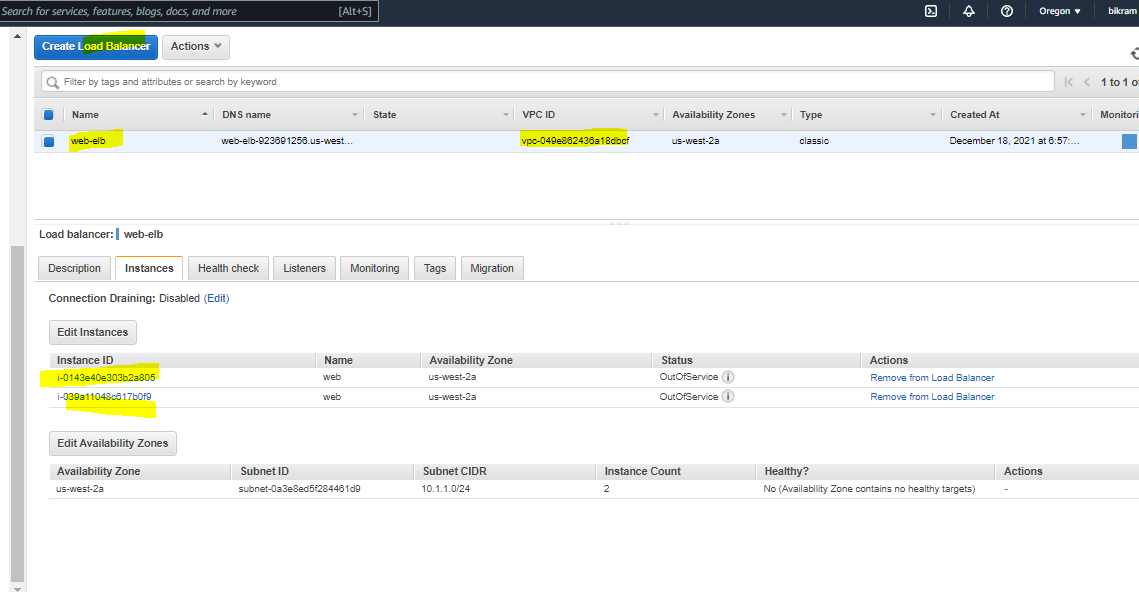
ASG



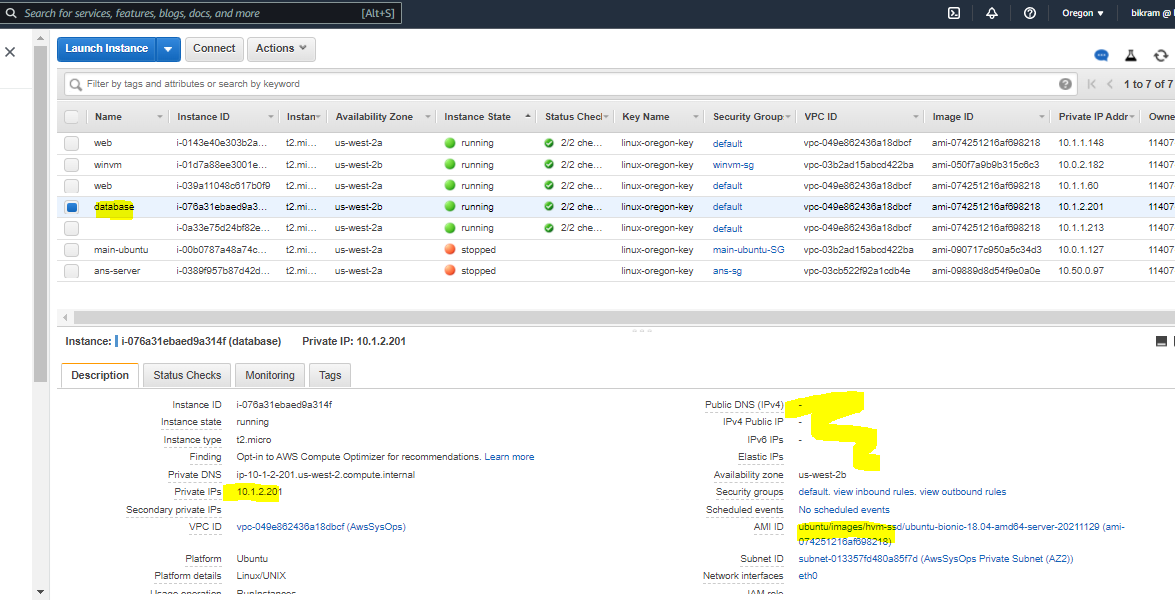
AMI ID



ELB

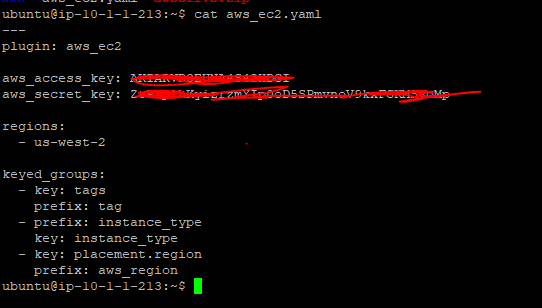
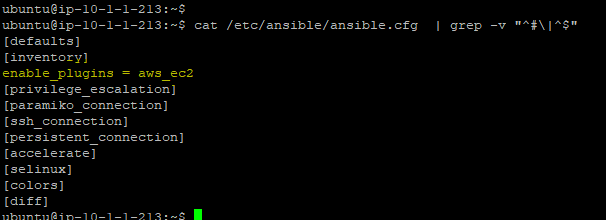


Database in Private subnet

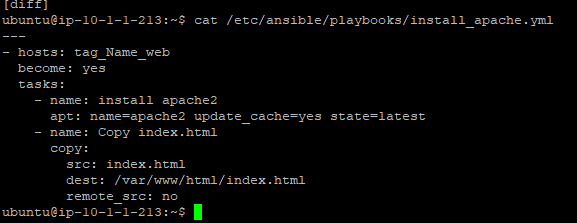


1. Ansible task:

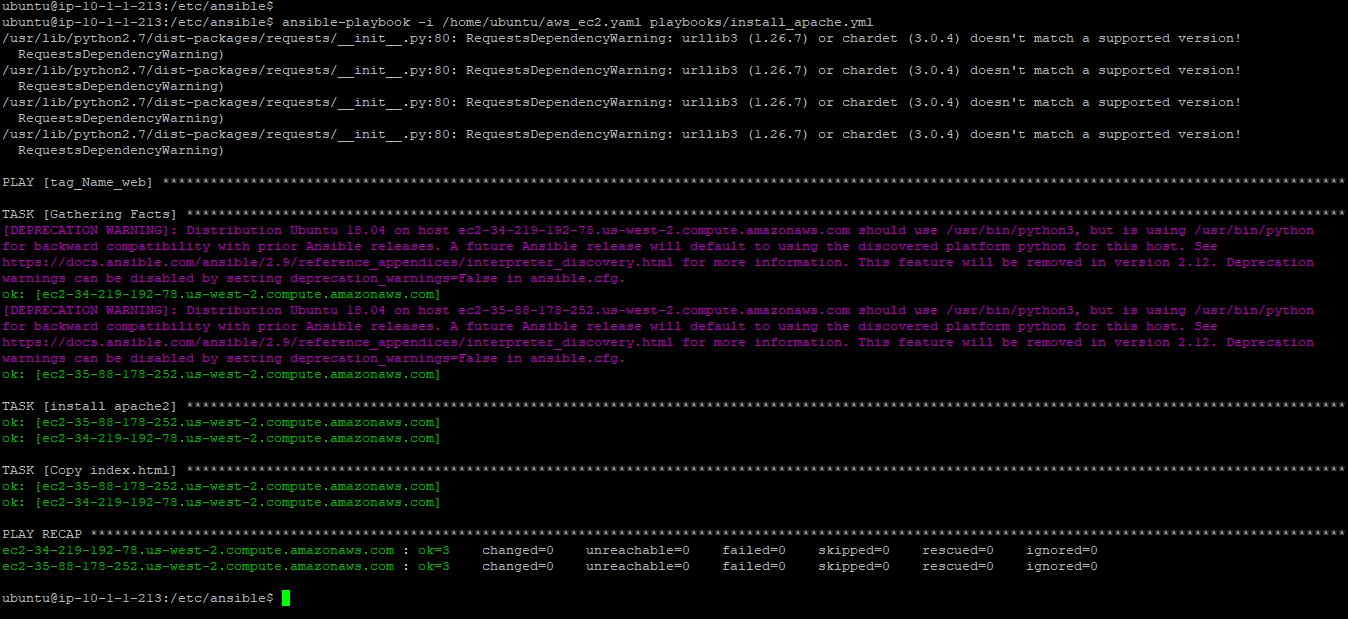
/etc/ansible/ansible.cfg and aws\_ec2.yml



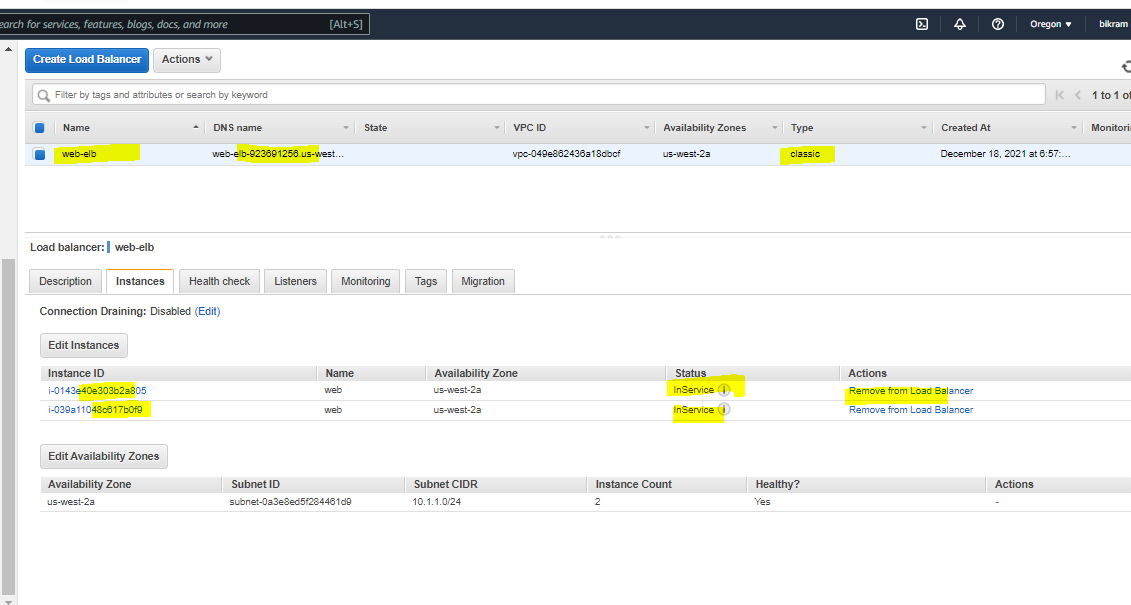
Install\_apache.yml



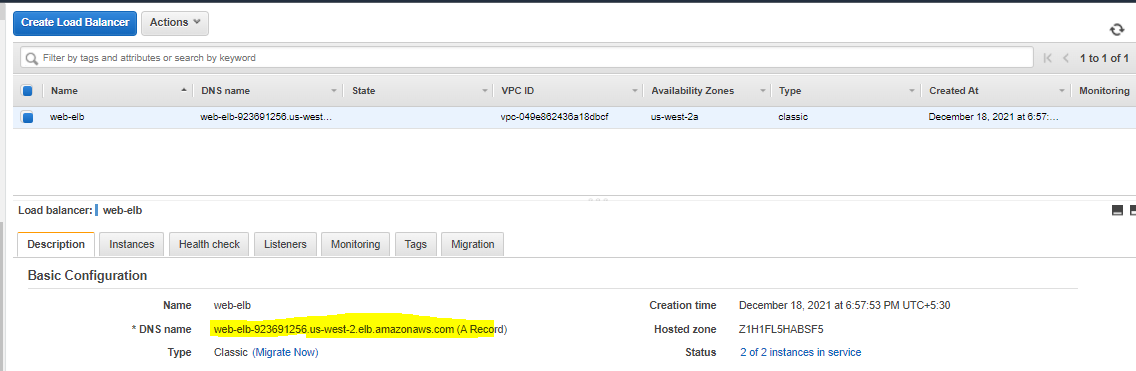
Playbook run result

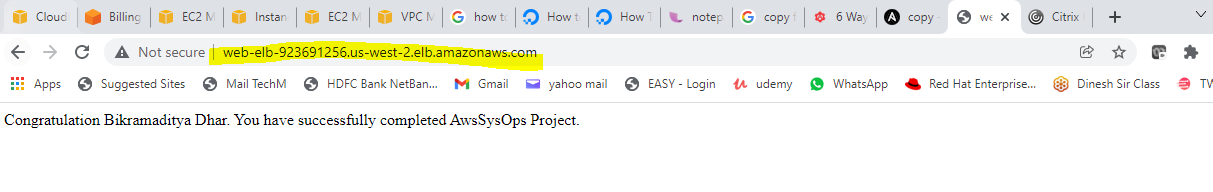


After installing apache instance showing In\_service in ELB



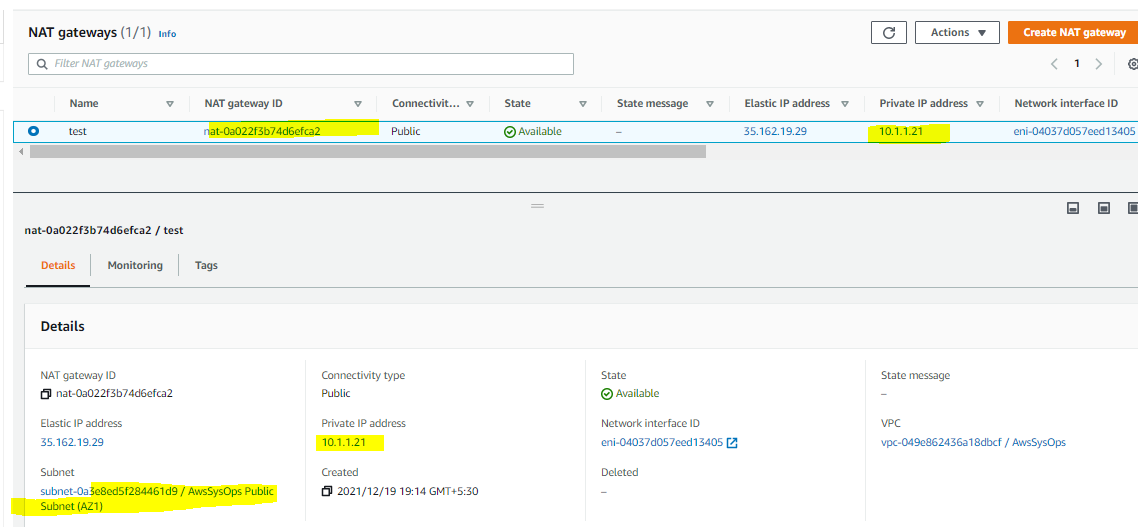
Page is opening successfully





Install mysql on Private Instance

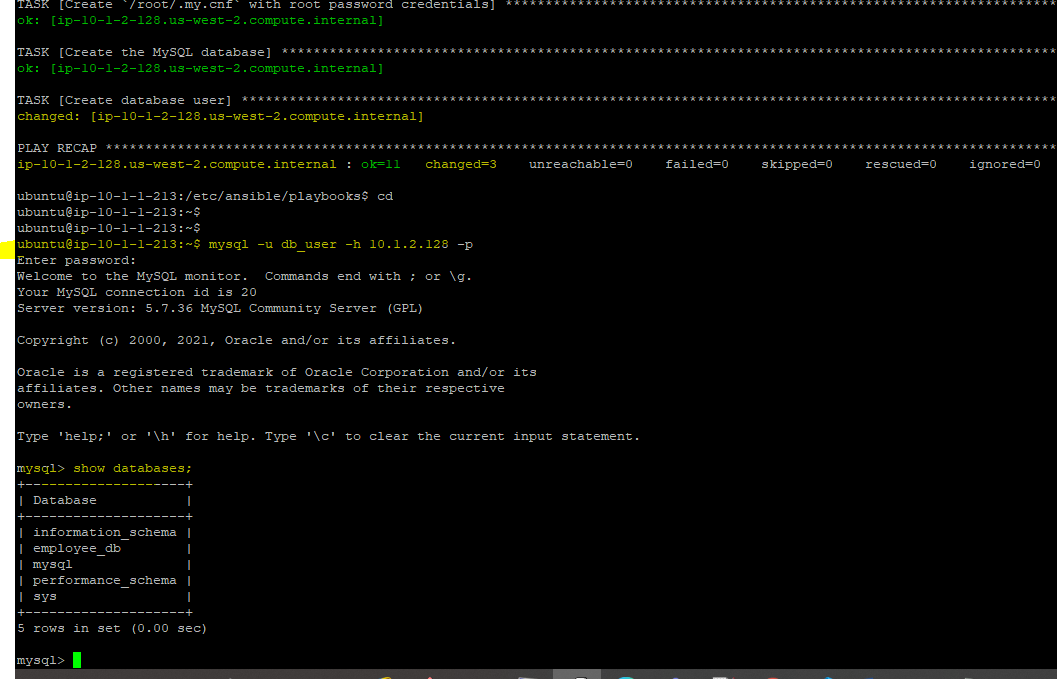
Create a nat-gw in public subnet and then add it to private route table.



Playbook run:

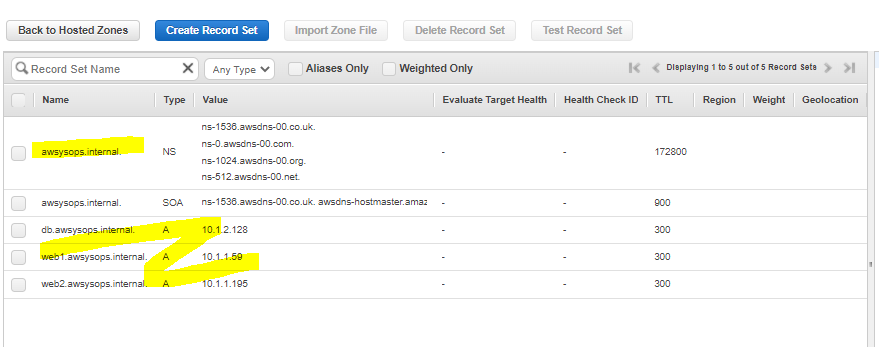


Connect DB

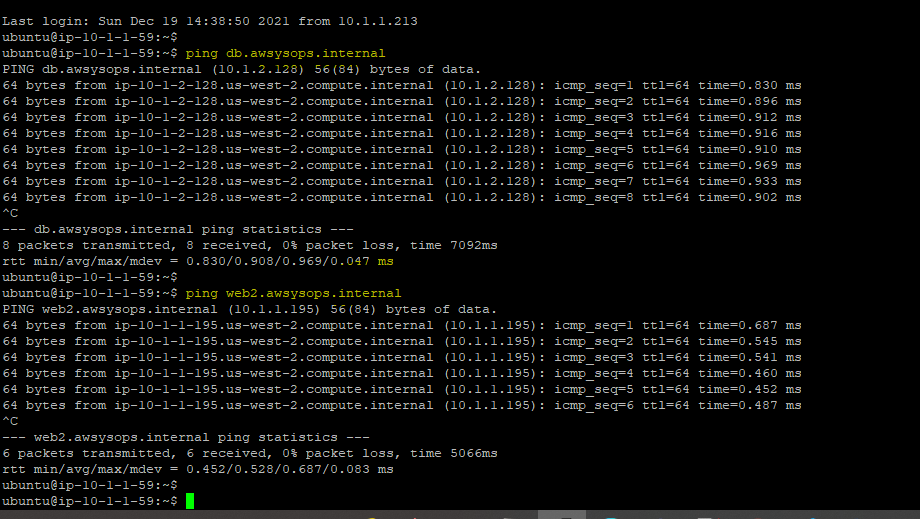


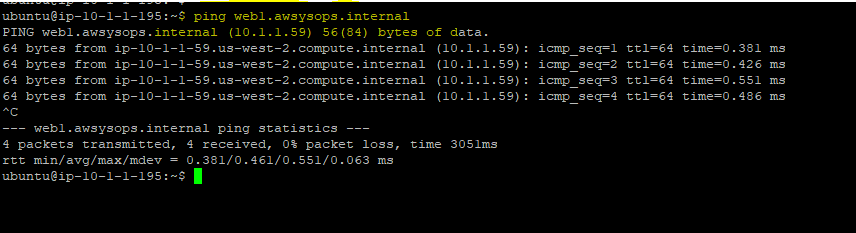
Part-2

**Secure communication and Security Management for application:**

route 53 config for vpc internal communications

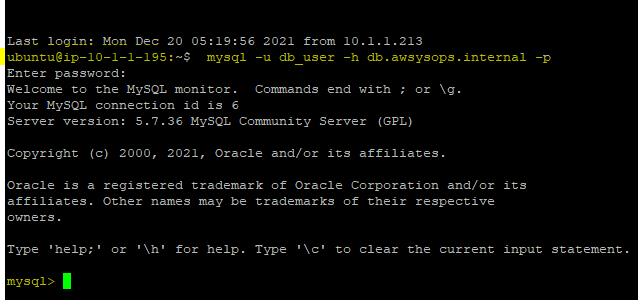
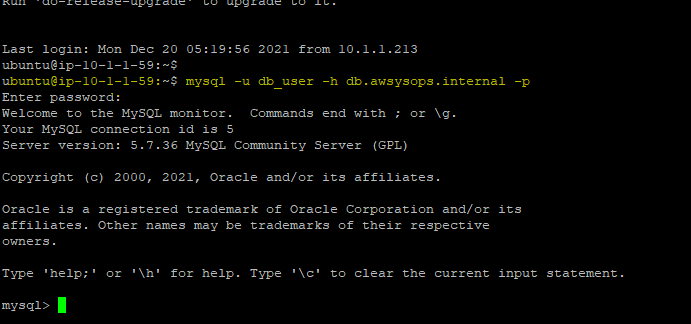
Ping results:



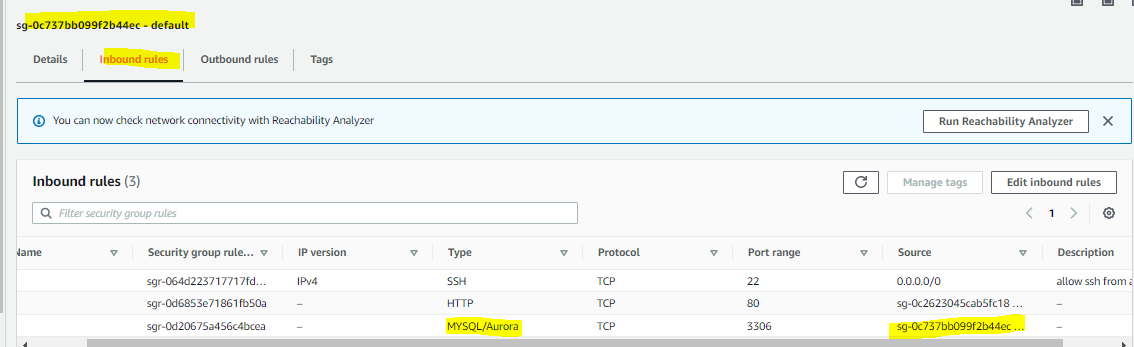
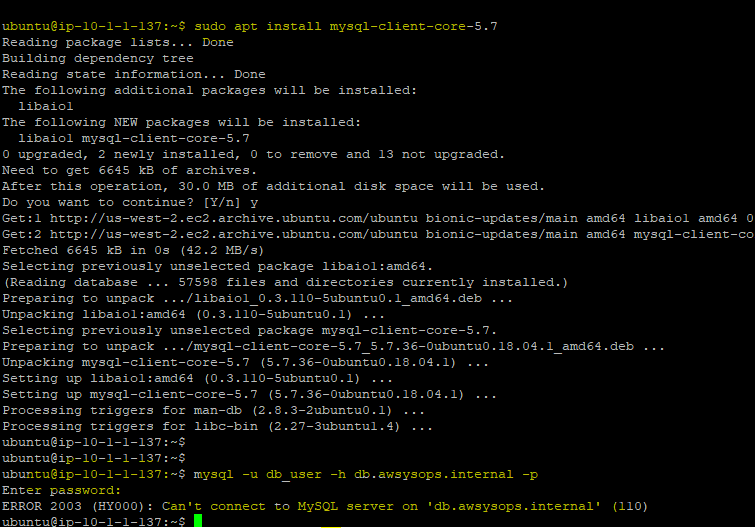


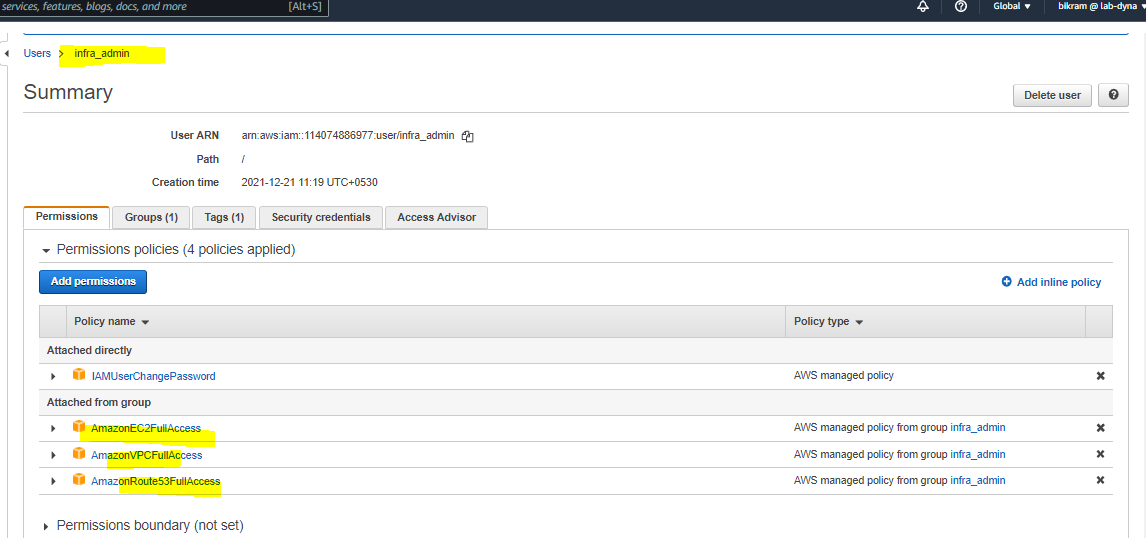
**mysql db should be accessible only from ASG**:

from web1/web2 db is accessible



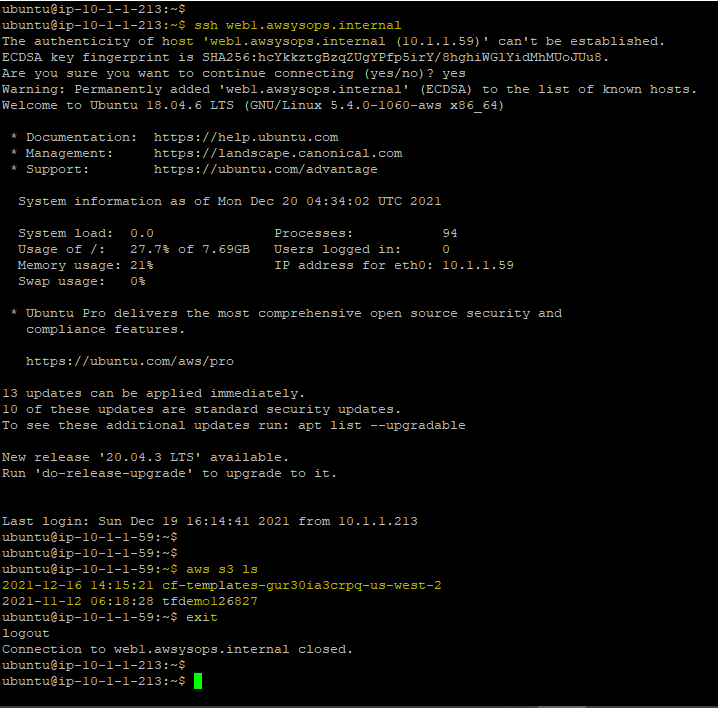
But not accessible from another instance in same vpc



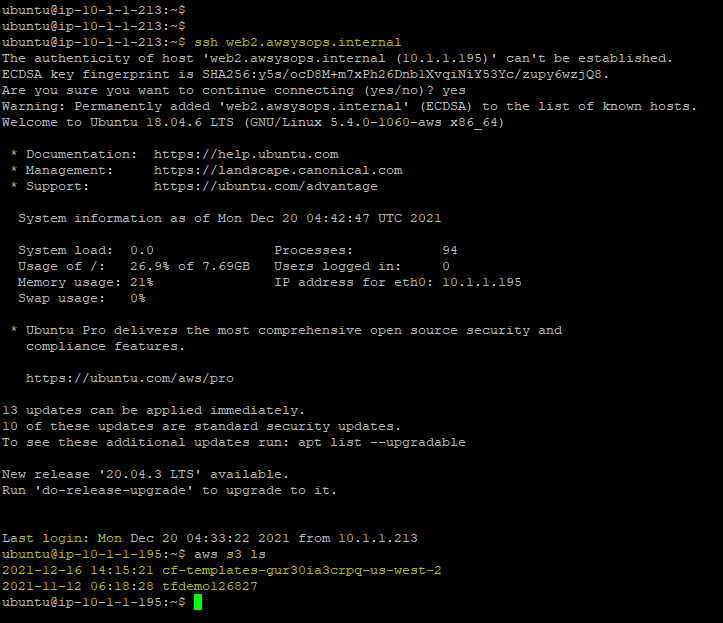
**user to manage app infra like vpc, route 53 and ec2**

**s3 buckets to store log files ----- name -** [app-logs-bikram1234](https://s3.console.aws.amazon.com/s3/buckets/app-logs-bikram1234)

**all web instances should have permission to access S3**

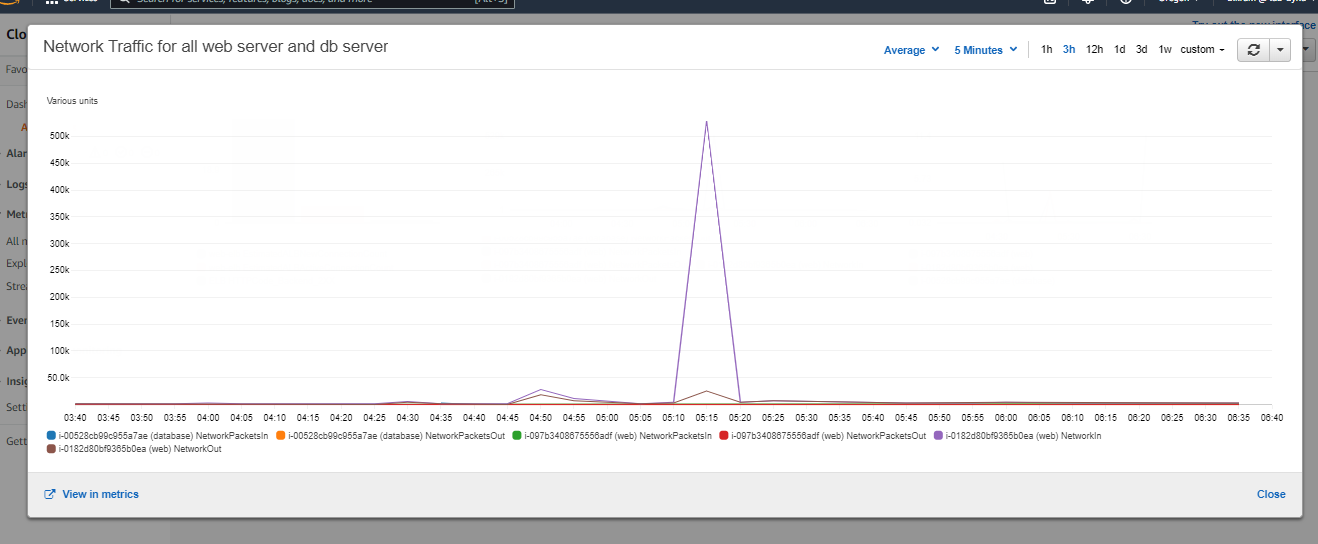
web1.awsysops.internal  


web2.awsysops.internal

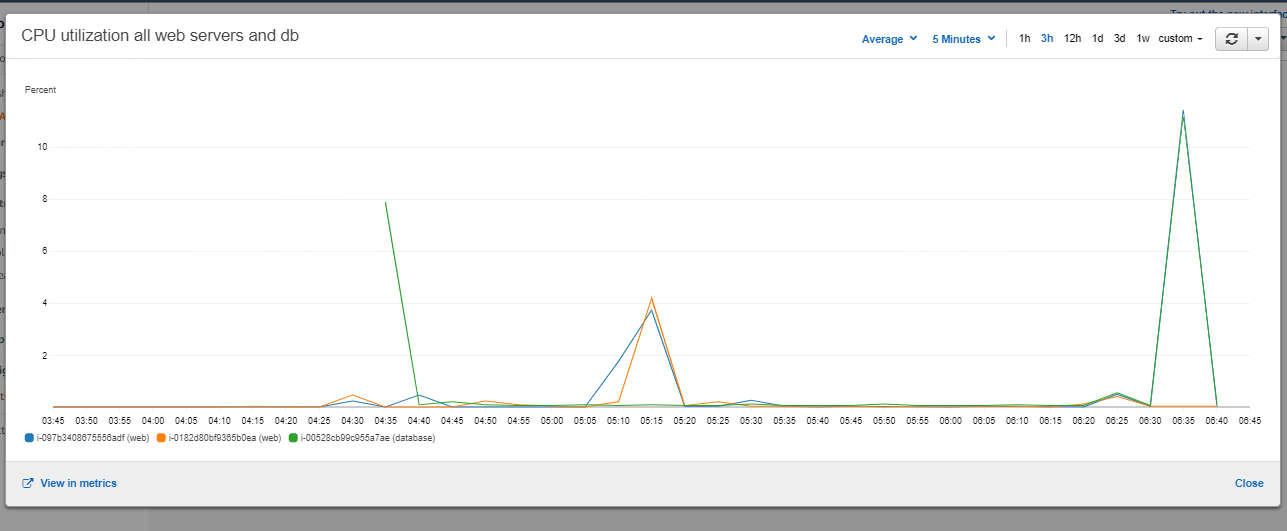


Monitoring App and App Infrastructure:

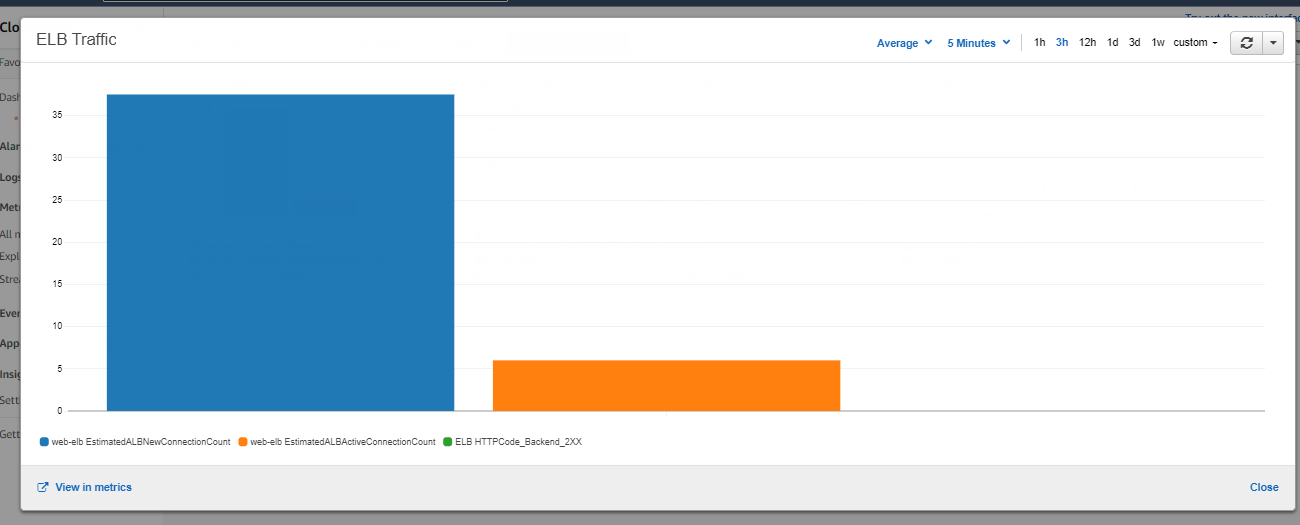
Network traffic:



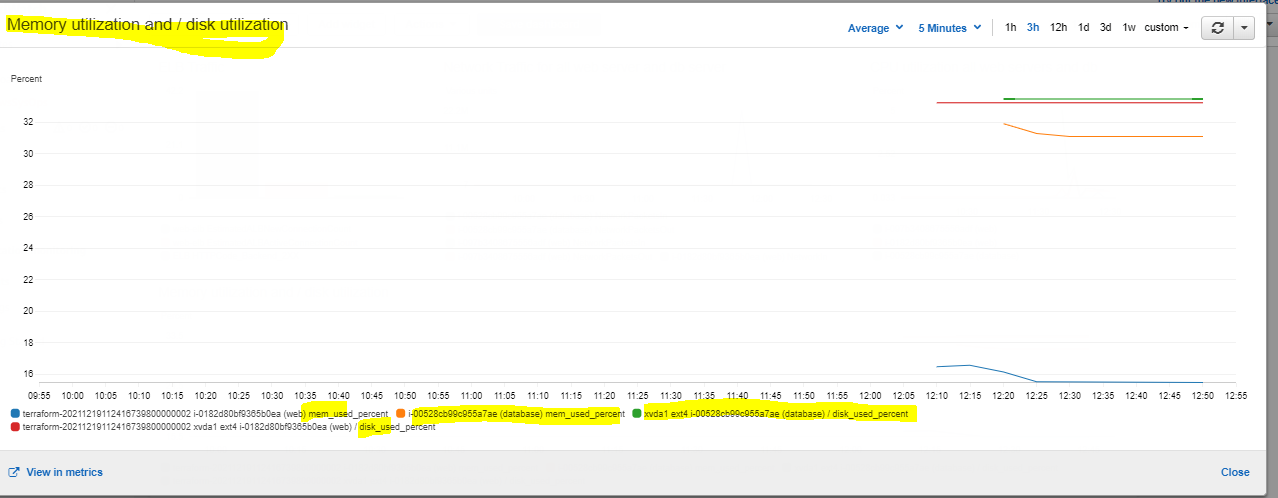
Cpu utilization:::



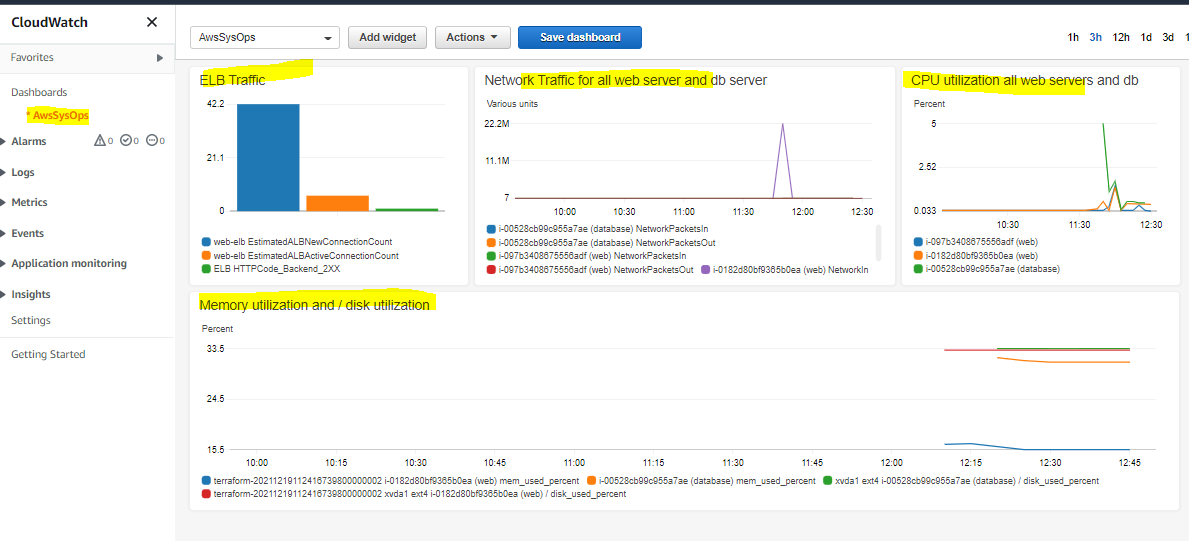
LB traffic:



Memory and / disk space utilization



AwsSysOps cloudwatch Dashboard:



Thank You !!

Bikramaditya Dhar

Emp id - 126827