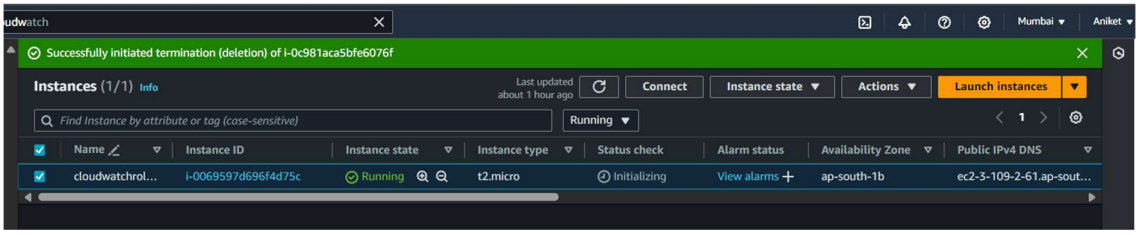
CLOUDWATCH PRATICAL

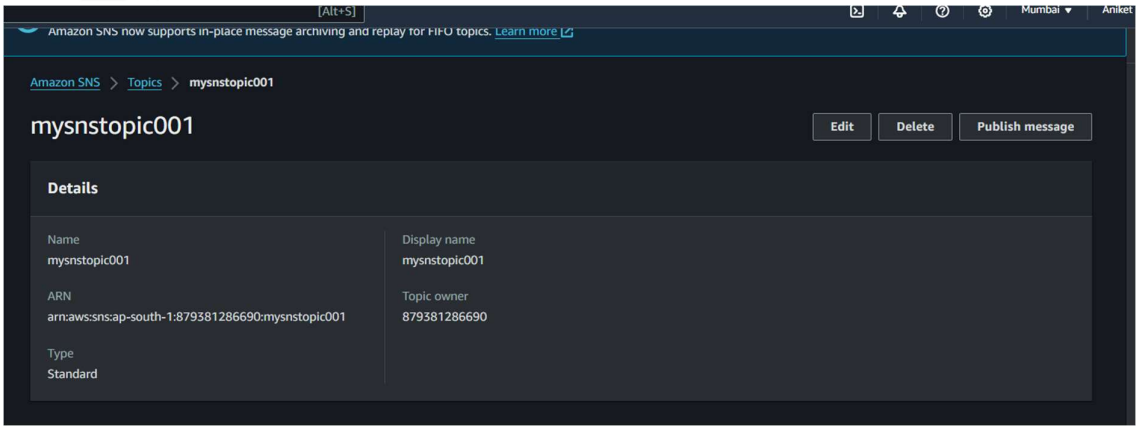
ANIKET THORAT..

- Monitor the CPU utilization of Instance and set threshold of utilization greater than 80% and send alert via SNS.

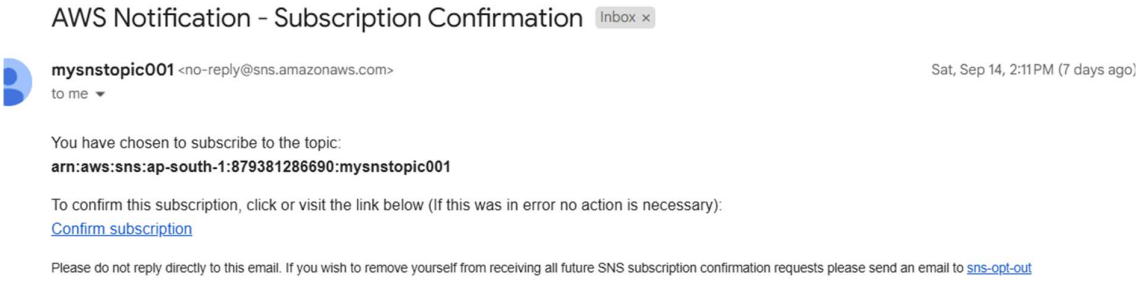
1. CREATE A INSTANCE



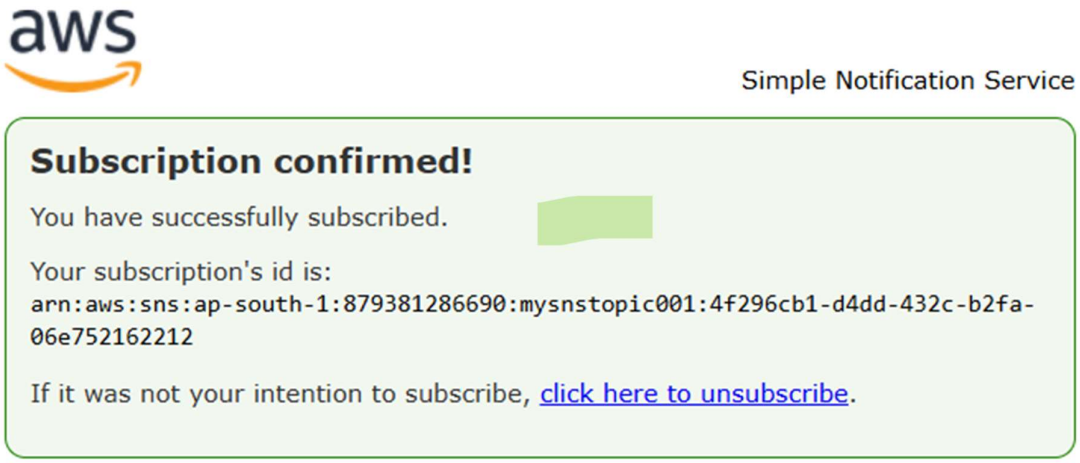
2. create SNS topic



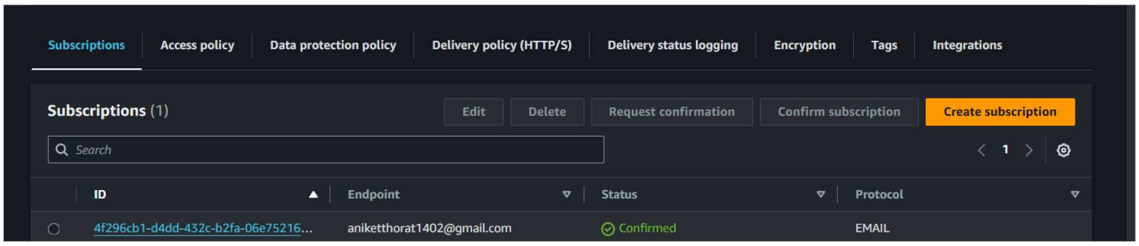
3. SUBSCRIBE THE SNS..



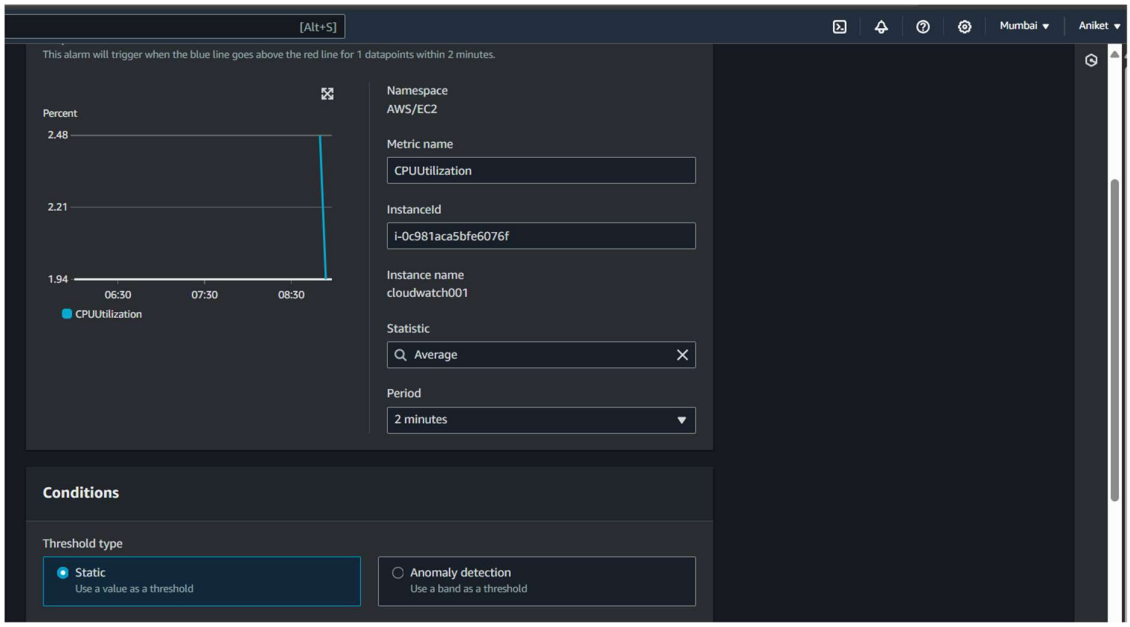
4. SUBSCRIBTION CONFIRM



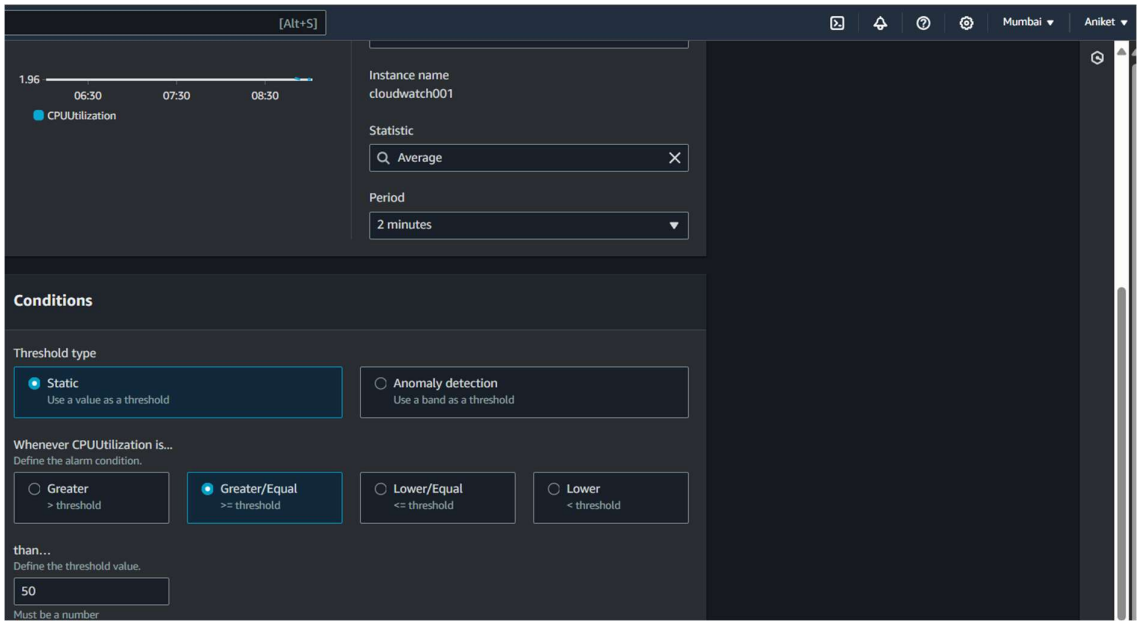
5. AFTER SUBSCRIPTION DONE THE STATUS WILL CHANGE TO CONFIRM



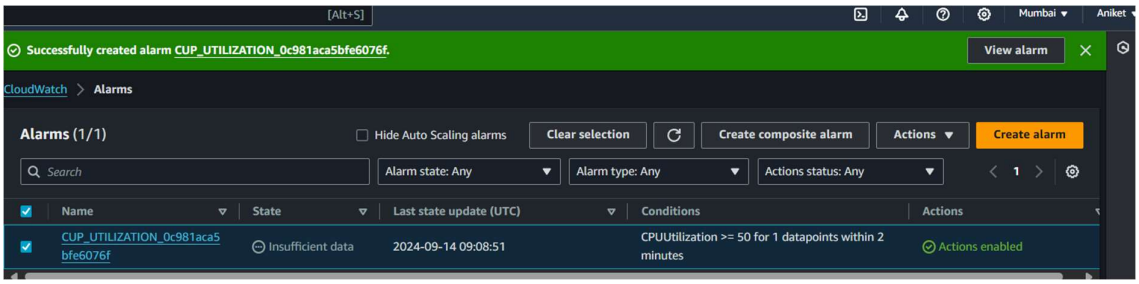
6. CREATE A CLOUD WATCH ALARM FOR CPU UTILIZATION
    a. Specify PERIOD and conditions



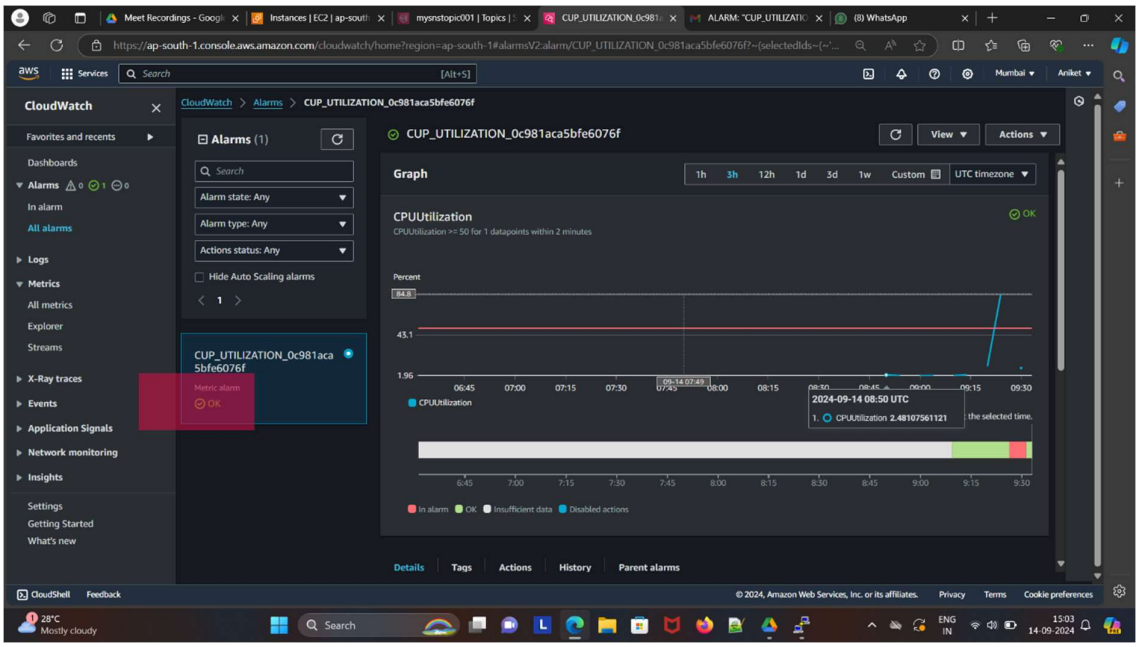
B . Configure THE ALARM CONDITION TO STATIC AND THRESHOLD VALUE >=50



C. CLOUD WATCH ALARM CREATED .



7. WE CAN CE THE CPU UTILIZATION IS IN OK STATE



8. TO INCREASE THE CPU UTILIZATION WE HAVE TO STRESS PAKAGE

STEPS

A. sudo amazon-linux-extras install epel -y

B. sudo yum install stress -y

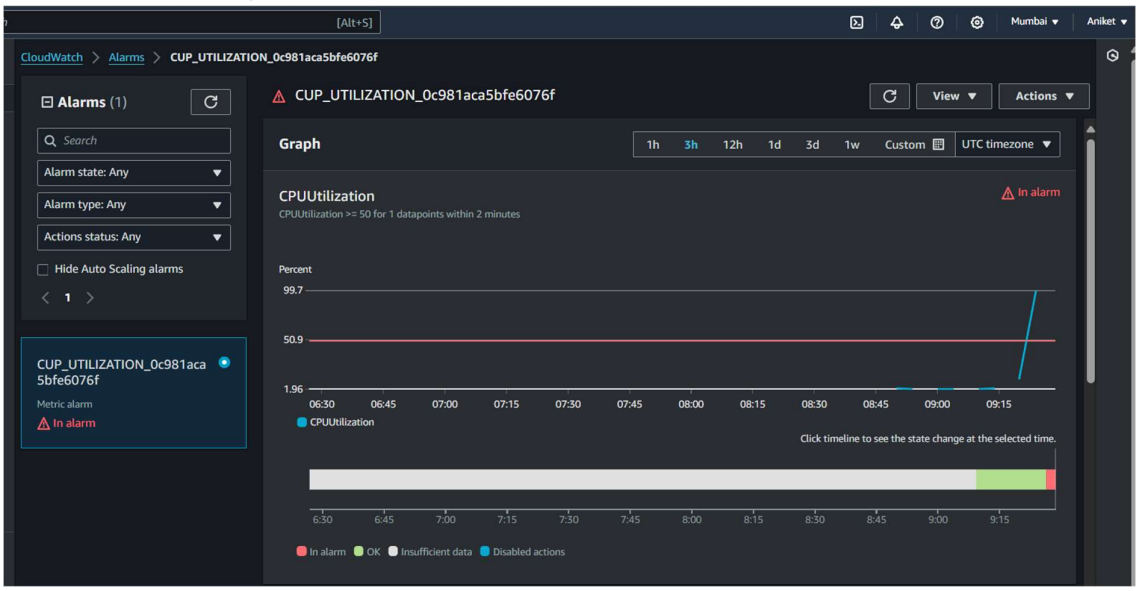
```
root@ip-172-31-5-4:~
warning: /var/cache/yum/x86_64/2/epel/packages/stress-1.0.4-16.el7.x86_64.rpm: H
eader V3 RSA/SHA256 Signature, key ID 352c64e5: NOKEY
Public key for stress-1.0.4-16.el7.x86_64.rpm is not installed
stress-1.0.4-16.el7.x86_64.rpm                           |  39 kB   00:00
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7
Importing GPG key 0x352C64E5:
 Userid     : "Fedora EPEL (7) <epel@fedoraproject.org>"
 Fingerprint: 91e9 7d7c 4a5e 96f1 7f3e 888f 6a2f aea2 352c 64e5
 Package    : epel-release-7-11.noarch (@amzn2extra-epel)
 From       : /etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : stress-1.0.4-16.el7.x86_64                                  1/1
  Verifying  : stress-1.0.4-16.el7.x86_64                                  1/1

Installed:
  stress.x86_64 0:1.0.4-16.el7
```

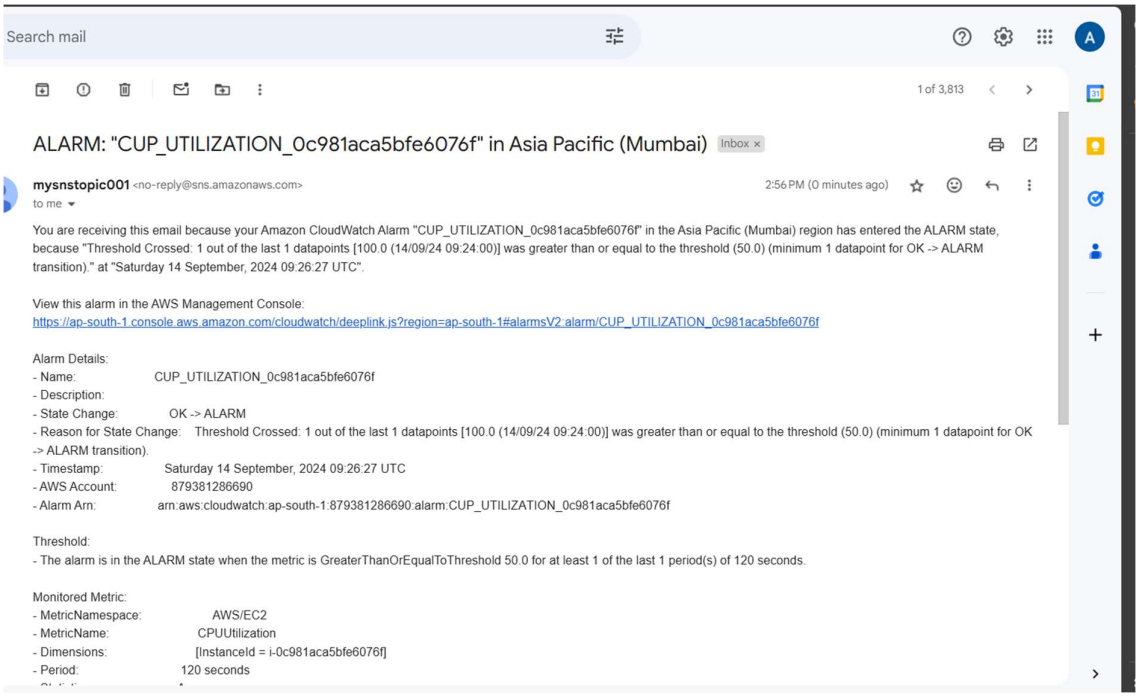
9. NOW TO INCREASE CPU UTILIZATION USE COMMAND (stress --CPU 20 --timeout 1000)

```
[root@ip-172-31-5-4 ~]# stress --cpu 20 --timeout 1000
stress: info: [3579] dispatching hogs: 20 cpu, 0 io, 0 vm, 0 hdd
```

10. Now we can see the cpu utilization is increased now it is alarm state

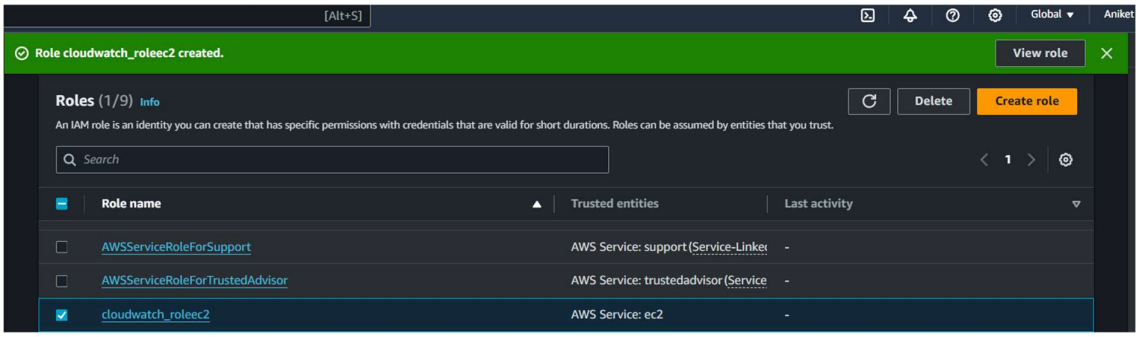


11. We have received an email

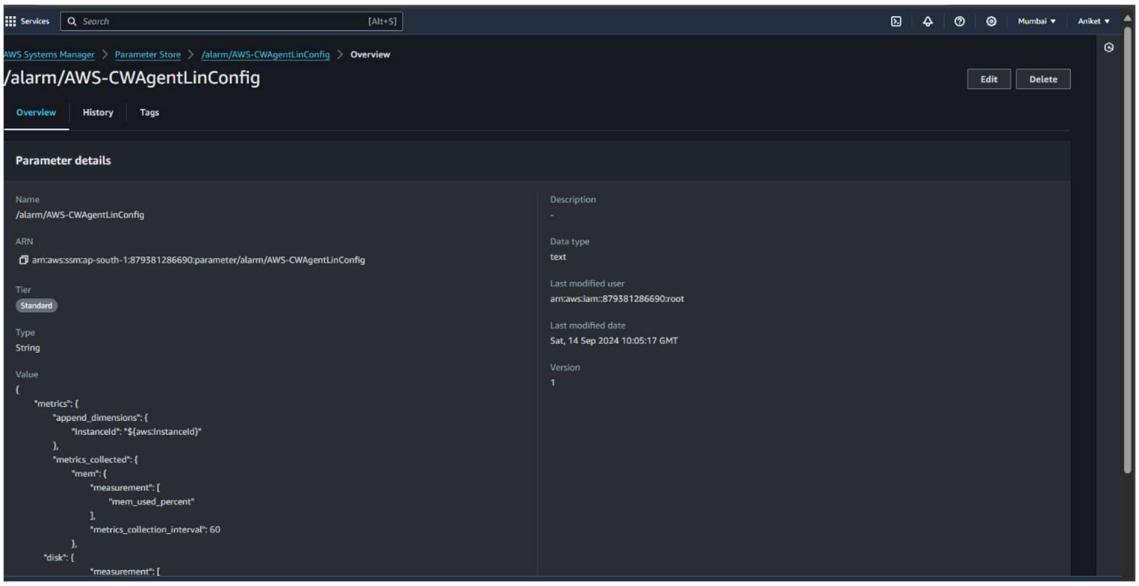


Install CloudAgent using bootstraping and create dashboard of Utilizations.

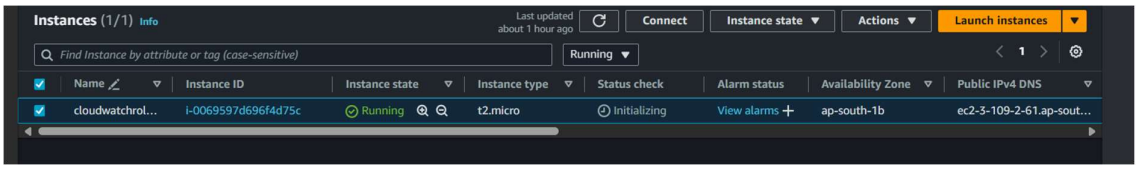
A. Create IAM role with (CloudWatchfullaccess & SSM)



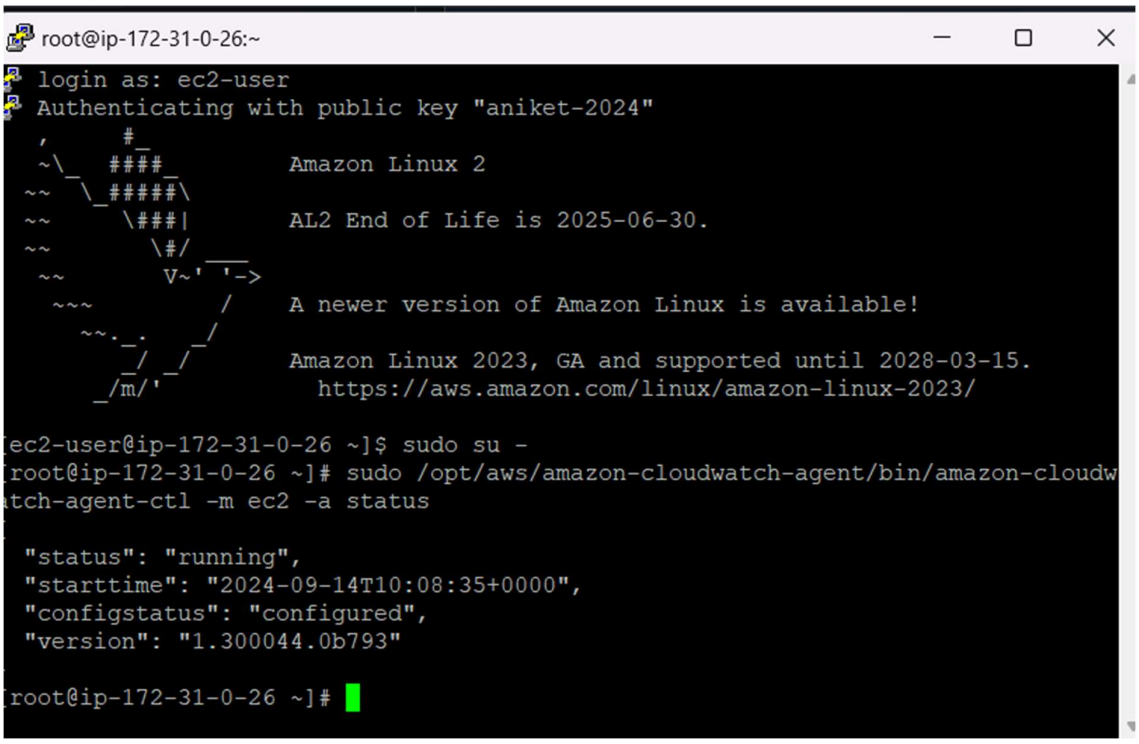
B. Create a Parameter in Systems Manger with the name "/alarm/AWS CWAgentLinConfig" and store the value.



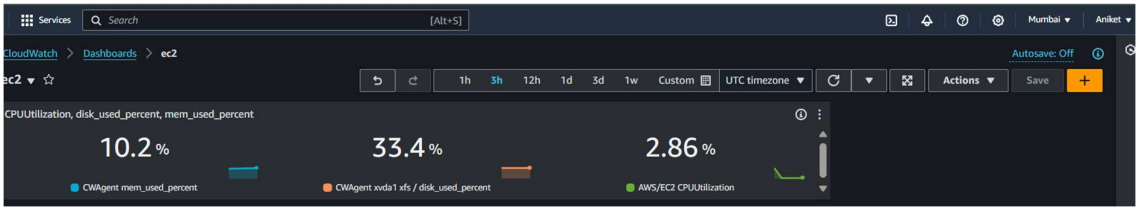
C. Create a instance



D. CloudAgent have been installed successfully



E. Created one Dashboard as “EC2” and add metrix



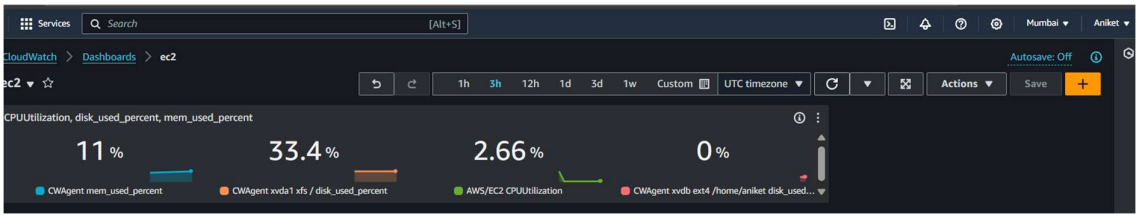
F. Create one EBS volume and mount it

```
[ec2-user@ip-172-31-0-26 ~]$ sudo su -
Last login: Sat Sep 14 10:11:42 UTC 2024 on pts/0
[root@ip-172-31-0-26 ~]# lsblk
NAME    MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0   8G  0 disk
└─xvda1 202:1    0   8G  0 part /
xvdb    202:16   0  10G  0 disk
[root@ip-172-31-0-26 ~]# mkfs -t ext4 /dev/xvdb
mke2fs 1.42.9 (28-Dec-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
655360 inodes, 2621440 blocks
131072 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=2151677952
80 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[root@ip-172-31-0-26 ~]# mkdir /home/aniket
[root@ip-172-31-0-26 ~]# mount /dev/xvdb /home/aniket
[root@ip-172-31-0-26 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        467M     0  467M   0% /dev
tmpfs           477M     0  477M   0% /dev/shm
tmpfs           477M  448K  476M   1% /run
tmpfs           477M     0  477M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  2.7G  5.4G  34% /
tmpfs            96M     0   96M   0% /run/user/1000
/dev/xvdb       9.7G   24K  9.2G   1% /home/aniket
[root@ip-172-31-0-26 ~]#
```

G. The dashboard created with four parameters (CPU-utilization,Memoey-utilization,root-disk-utilization & EBS-volume utilization)



Thanyou....