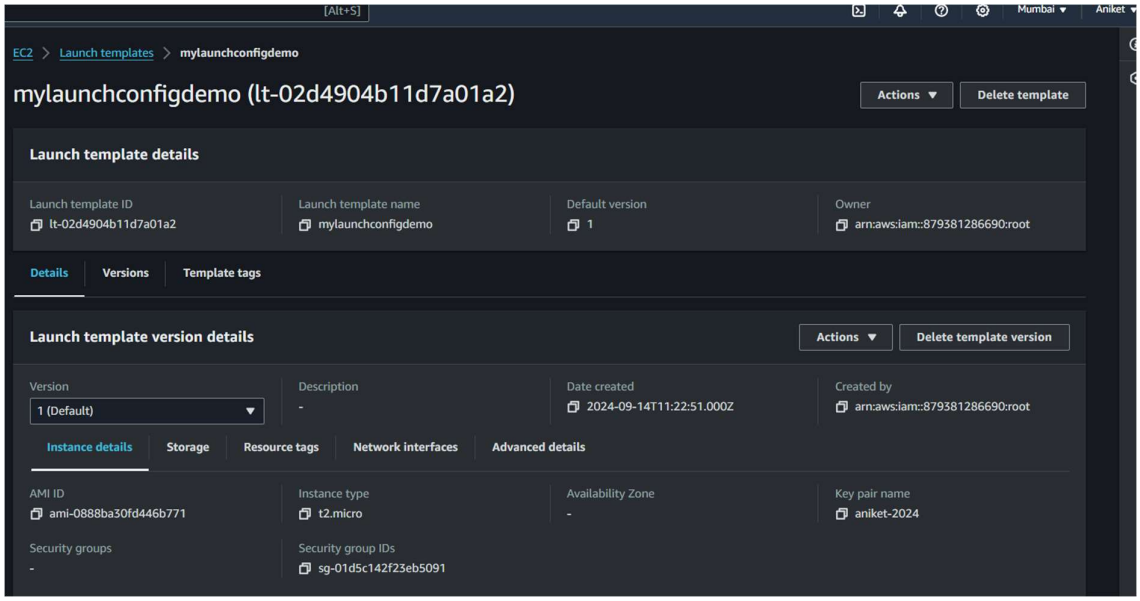
ANIKET D THORAT

AUTO SCALING PRATICAL DATE 12/09/2024

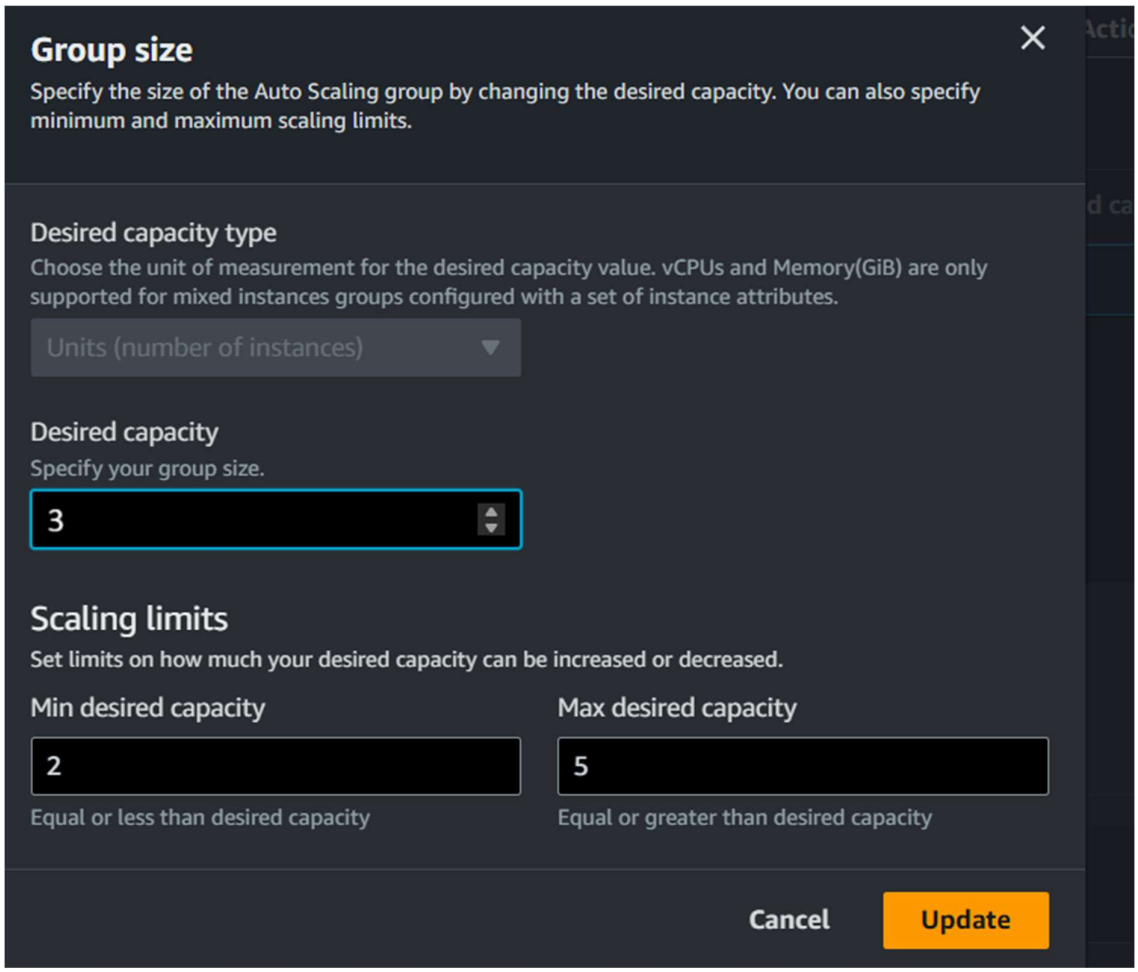
1) LAUNCH TEMPLETE



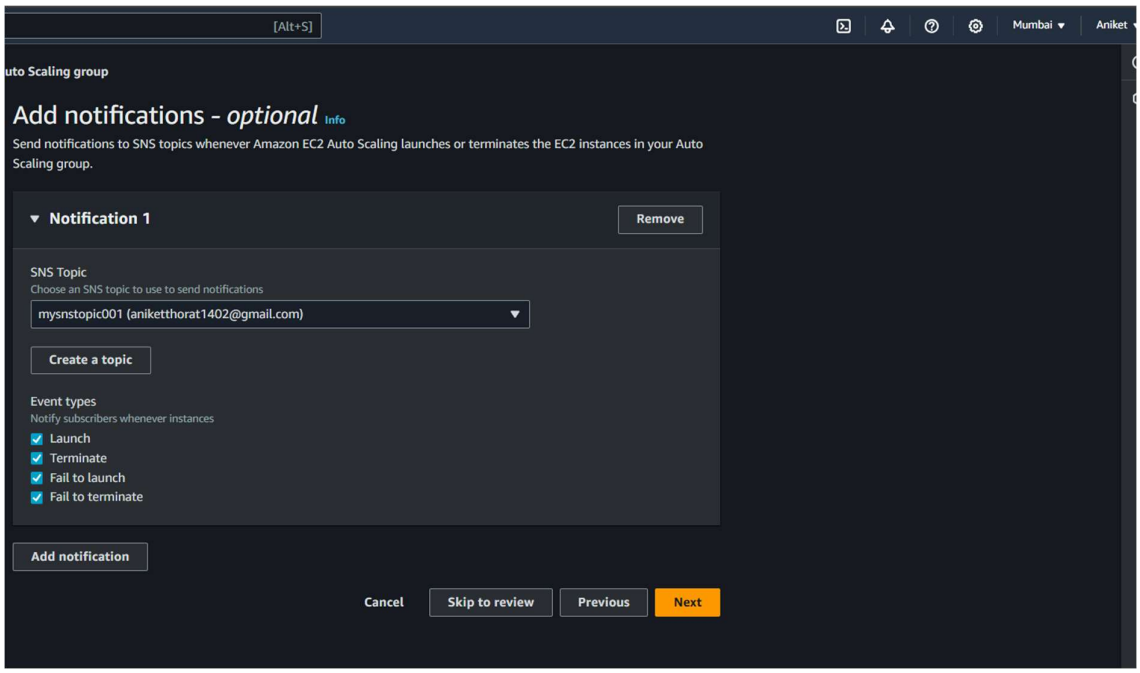
2) CREATE AUTOSCALING GROUP AND SELECT THE TEMPLETE

STEPS FOR CREATEING AUTOSCALIG GROUP…..

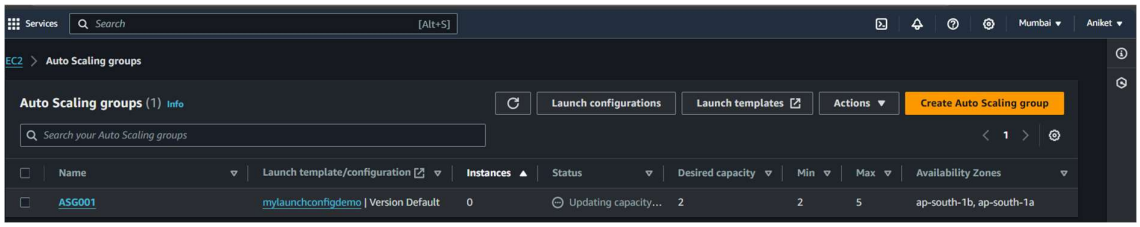
3) CONFIGURE GROUP SIZE AND SCALING



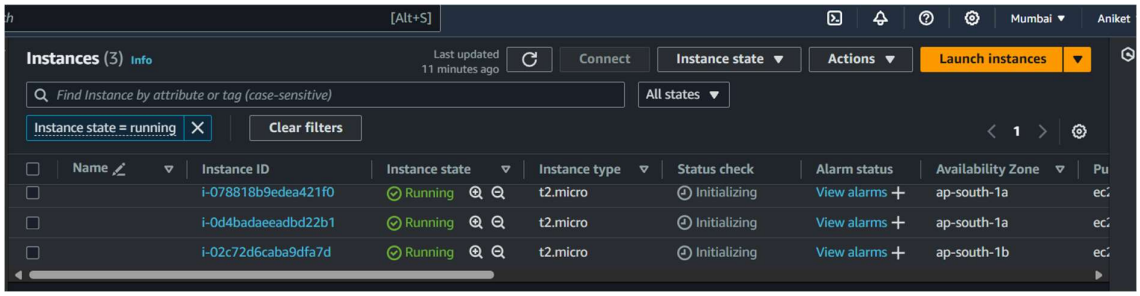
4) ADD SNS TOPIC



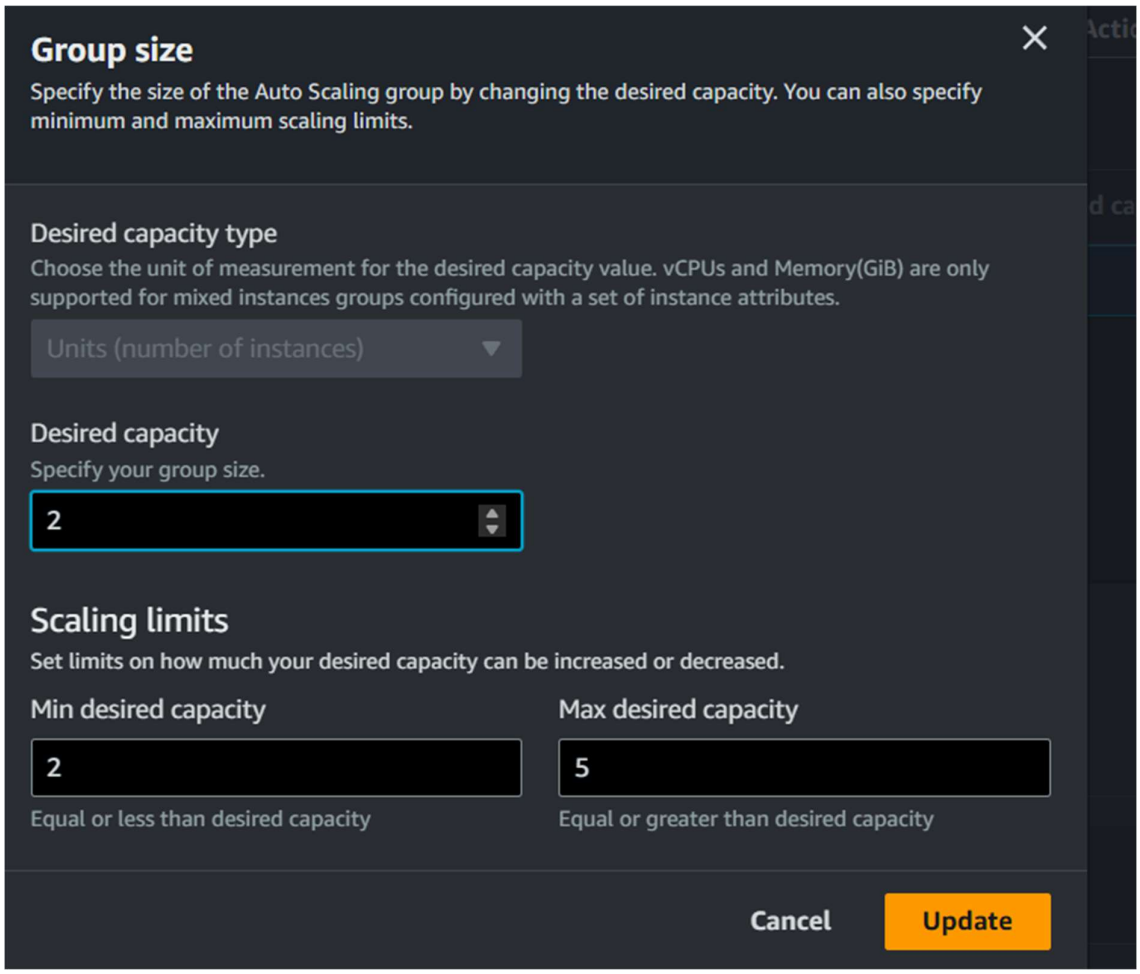
5) AUTO SCALING GROUP CREATED



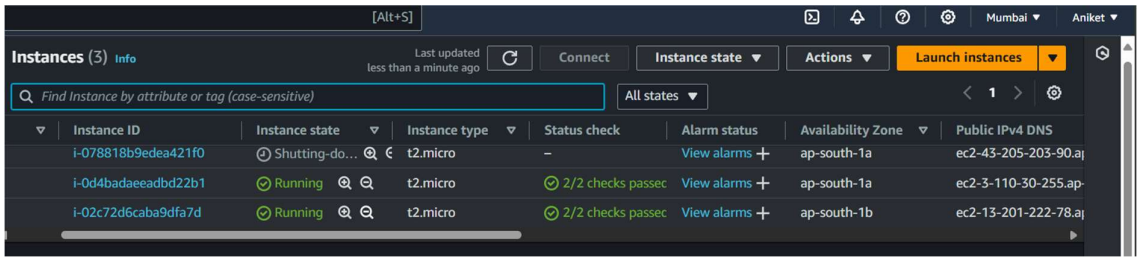
6) INSTANCE HAS BEEN CREATED AS PER WE MENTION



7) MANUAL SCALING – IF I CHANGE THE DESIRE CAPACITY '2'



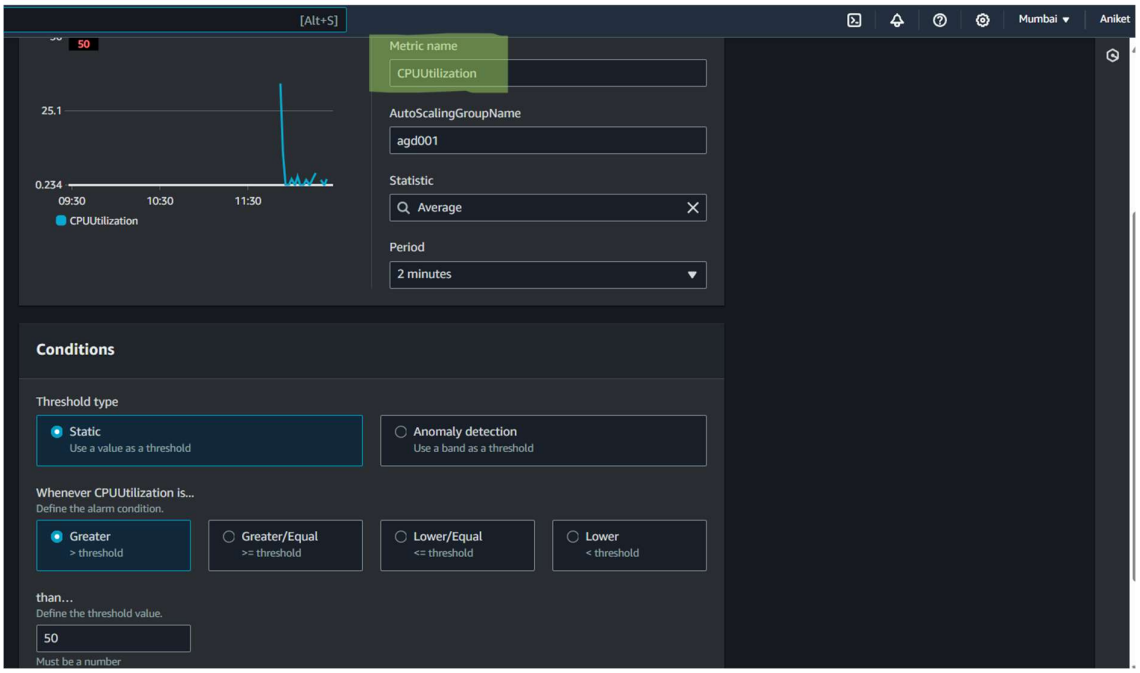
THEN ONE OF THE INSTANCE WILL TERMINATE



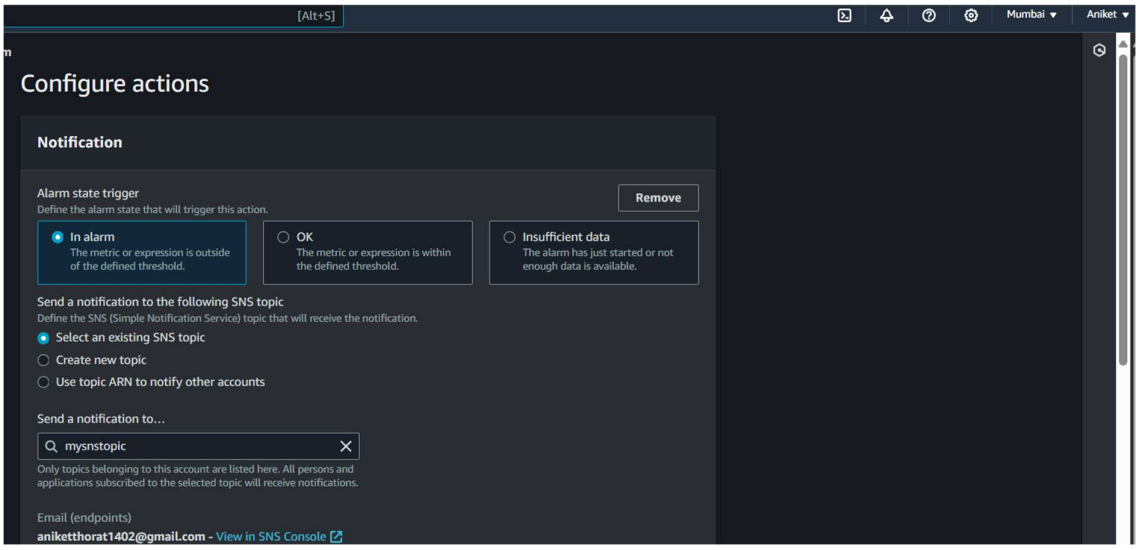
AUTOMATIC SCALING –

1. CREATE A ALARM FOR AUTO SCALING GROUP

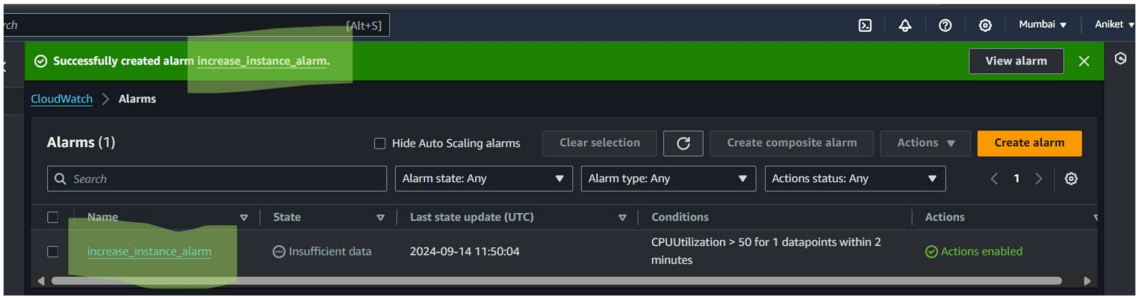
A .SELECT MATTIC (CPU UTILIZATION) And SELECT 2 minutes of timeperiod and threshold value of >50



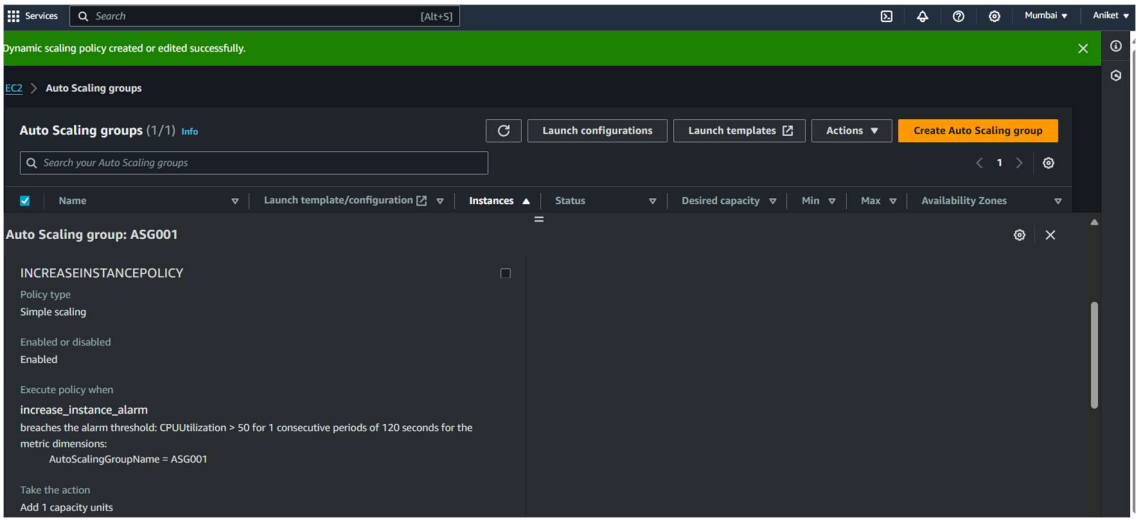
SELECT IN WHICH STATE ALARM NEED TO BE TRIGGED (IN ALARM) AND ADD SNS TOPIC



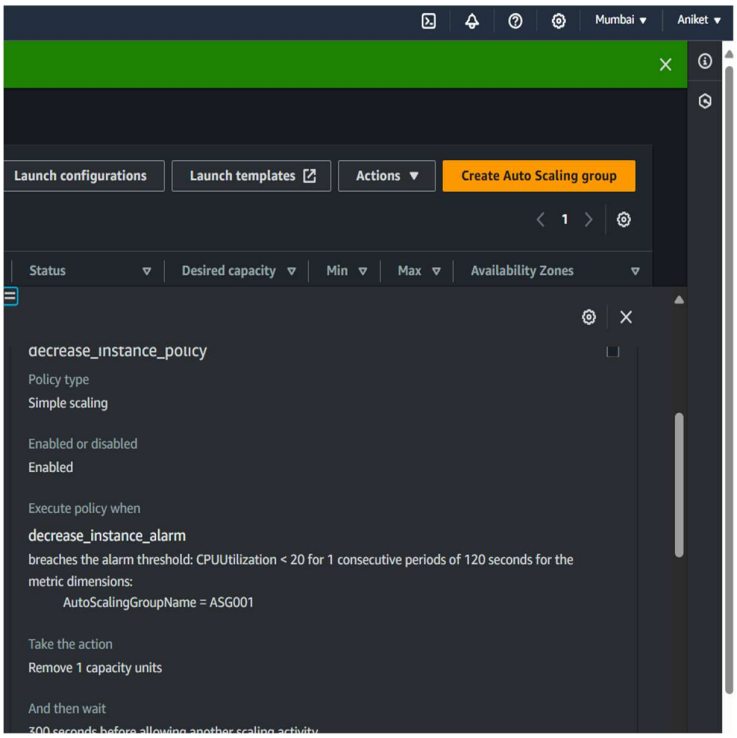
AND NOW JUST GIVE NAME (INCREASE _INSTANCE_ALARM) TO ALARM AND ALARM HAS BEEN CREATED



2. CREATE DYNAMIC POLICY AND AND ADD ALARM TAKE ACTION ADD ‘1’ (INCREASE_INSTANCE_ALARM)



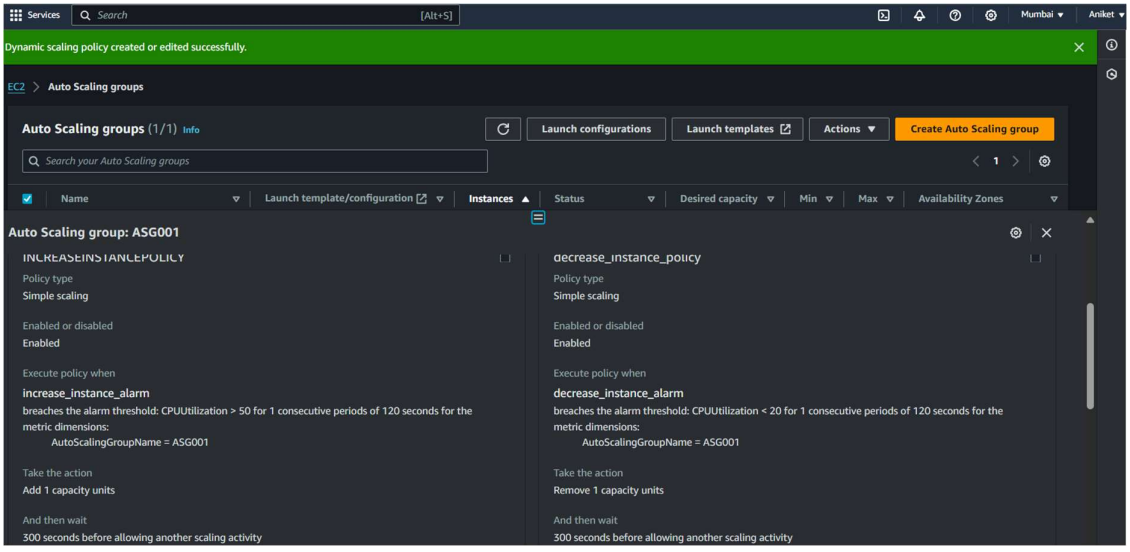
3. CREATE ONE MORE ALARM (DECREASE_INSTANCE_ALARM) THRESHOLD VALUE SHOULD BE <20,
AND CREATE ONE MORE DYNAMIC POLICY TAKE ACTION REMOVE ‘1’



WE HAVE CREATED TWO DYNAMIC POLICY

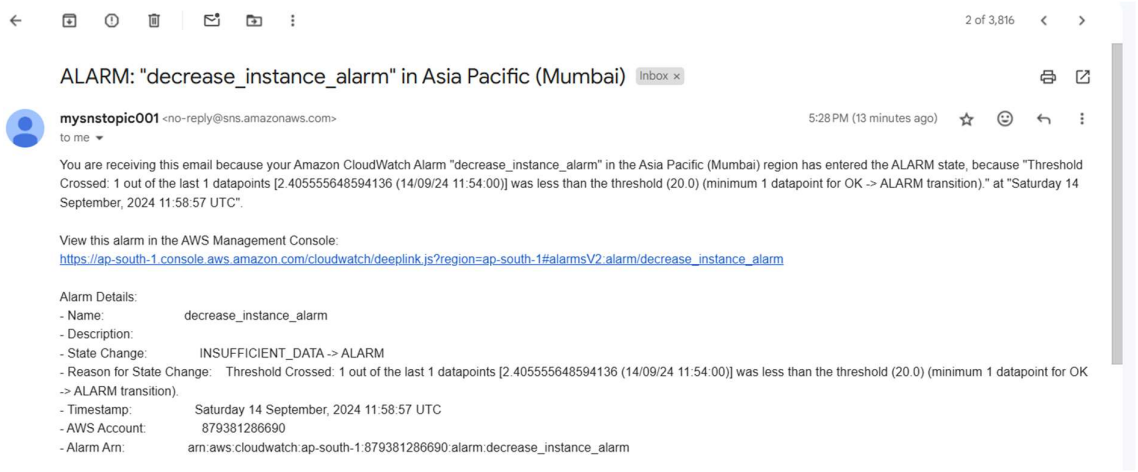
I. INCREASE_INSTANCE_POLICY

II. DECREASE_INSTANCE_POLICY



1. NOW WE CAN SEE THE DECREASE_INSTANCE_ALRM HAS BEEN TRIGGRED BECAUSE

THE CPU UTLIZATION GOES <20 %



2 of 3,816

ALARM: "decrease_instance_alarm" in Asia Pacific (Mumbai) Inbox ×

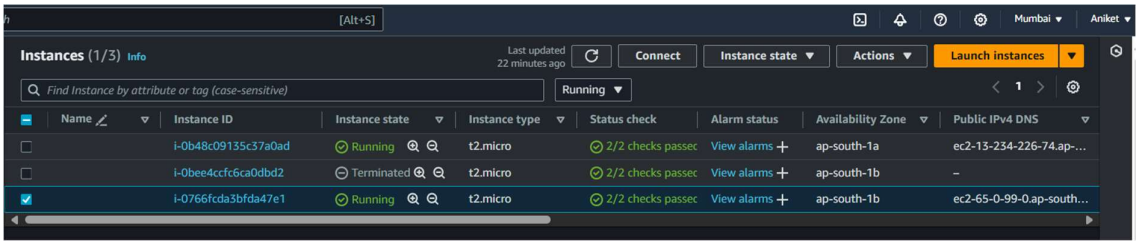
mysnstopic001 <no-reply@sns.amazonaws.com> 5:28 PM (13 minutes ago)
to me

You are receiving this email because your Amazon CloudWatch Alarm "decrease_instance_alarm" in the Asia Pacific (Mumbai) region has entered the ALARM state, because "Threshold Crossed: 1 out of the last 1 datapoints [2.405555648594136 (14/09/24 11:54:00)] was less than the threshold (20.0) (minimum 1 datapoint for OK -> ALARM transition)." at "Saturday 14 September, 2024 11:58:57 UTC".

View this alarm in the AWS Management Console:
https://ap-south-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=ap-south-1#alarmsV2:alarm/decrease_instance_alarm

Alarm Details:
- Name: decrease_instance_alarm
- Description:
- State Change: INSUFFICIENT_DATA -> ALARM
- Reason for State Change: Threshold Crossed: 1 out of the last 1 datapoints [2.405555648594136 (14/09/24 11:54:00)] was less than the threshold (20.0) (minimum 1 datapoint for OK -> ALARM transition).
- Timestamp: Saturday 14 September, 2024 11:58:57 UTC
- AWS Account: 879381286690
- Alarm Arn: arn:aws:cloudwatch:ap-south-1:879381286690:alarm:decrease_instance_alarm

NOW ONE INSTANCE WILL BE TERMINATED FORM RUNNING INSTANCE



[Alt+S] Mumbai Aniket

Instances (1/3) Info

Last updated 22 minutes ago | Connect | Instance state | Actions | Launch instances

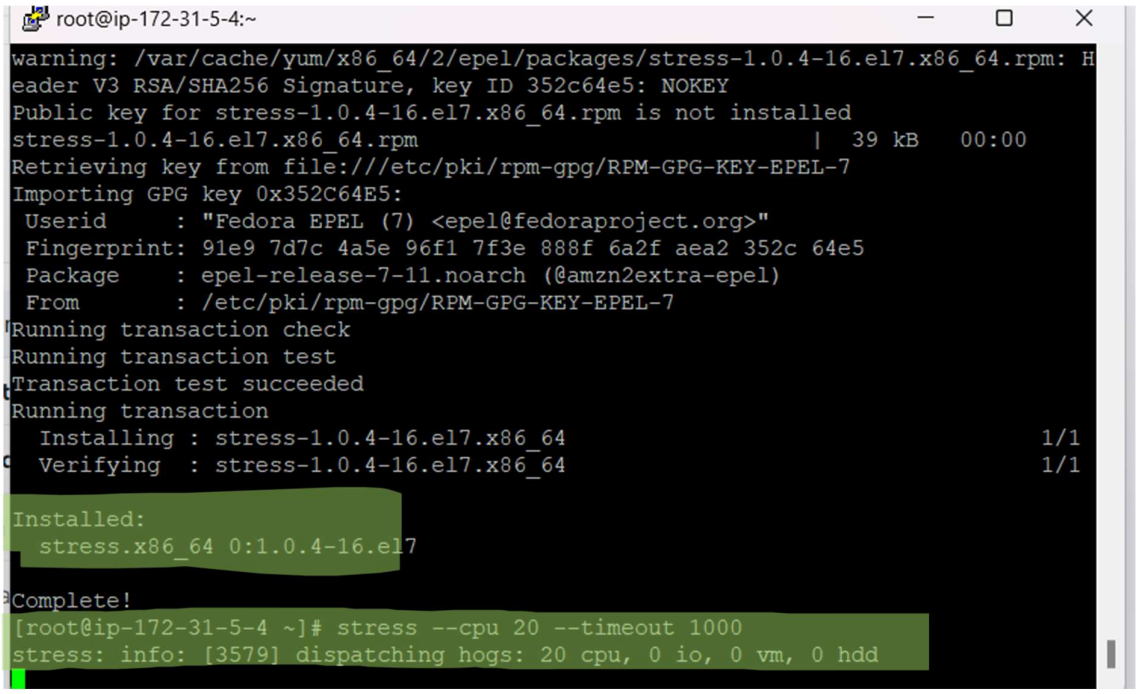
Find Instance by attribute or tag (case-sensitive) | Running | 1

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
	i-0b48c09135c37a0ad	Running	t2.micro	2/2 checks passed	View alarms	ap-south-1a	ec2-13-234-226-74.ap-...
	i-0bee4ccfc6ca0dbd2	Terminated	t2.micro	2/2 checks passed	View alarms	ap-south-1b	–
☑	i-0766fcda3bfda47e1	Running	t2.micro	2/2 checks passed	View alarms	ap-south-1b	ec2-65-0-99-0.ap-south...

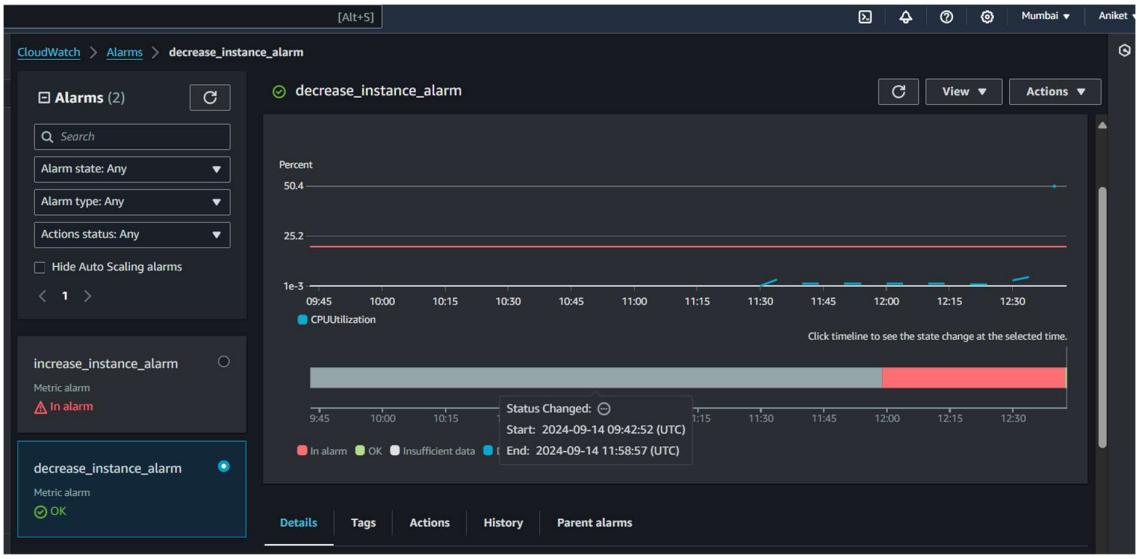
2. TO TRIGGER THE INCREASE_INSTANCE ALARM WE HAVE TO INCREASE THE CPU UTILIZATION WE WILL DO THAT BY INSTALLING ‘ STRESS ’ ON BOTH THE RUNNING INSTANCES

ENTER THE COMMAND for increasing cpu utilization

‘stress __cpu 20 –timeout 1000 ‘



1. Now we can check the cup utilization increases



ALARM: "increase_instance_alarm" in Asia Pacific (Mumbai) Inbox ×

mysnstopic001 <no-reply@sns.amazonaws.com> Sat, Sep 14, 6:12 PM (6 days ago)
to me

You are receiving this email because your Amazon CloudWatch Alarm "increase_instance_alarm" in the Asia Pacific (Mumbai) region has entered the ALARM state, because "Threshold Crossed: 1 out of the last 1 datapoints [50.77731796785065 (14/09/24 12:40:00)] was greater than the threshold (50.0) (minimum 1 datapoint for OK -> ALARM transition)." at "Saturday 14 September, 2024 12:42:54 UTC".

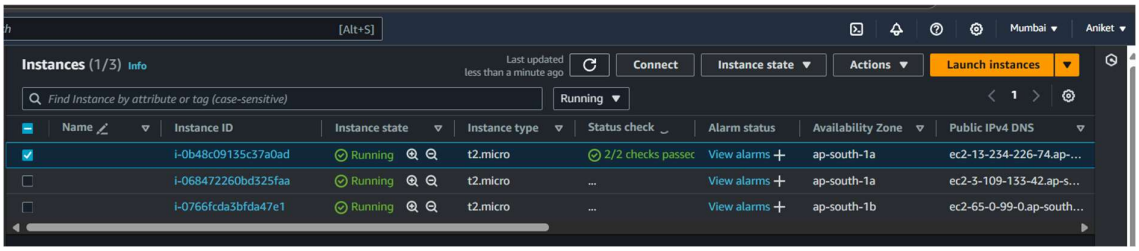
View this alarm in the AWS Management Console:
https://ap-south-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=ap-south-1#alarmsV2:alarm/increase_instance_alarm

Alarm Details:
- Name: increase_instance_alarm
- Description:
- State Change: OK -> ALARM
- Reason for State Change: Threshold Crossed: 1 out of the last 1 datapoints [50.77731796785065 (14/09/24 12:40:00)] was greater than the threshold (50.0) (minimum 1 datapoint for OK -> ALARM transition).
- Timestamp: Saturday 14 September, 2024 12:42:54 UTC
- AWS Account: 879381286690
- Alarm Arn: arn:aws:cloudwatch:ap-south-1:879381286690:alarm:increase_instance_alarm

Threshold:
- The alarm is in the ALARM state when the metric is GreaterThanThreshold 50.0 for at least 1 of the last 1 period(s) of 120 seconds.

Monitored Metric:
- MetricNamespace: AWS/EC2
- MetricName: CPUUtilization
- Dimensions: [AutoScalingGroupName = ASG001]
- Period: 120 seconds

Now it will take action and create ‘1’ instance



Thankyou….