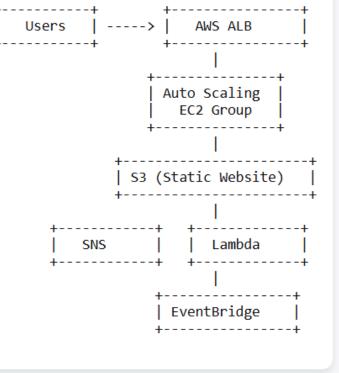


Resilient Web Server with Idle Resource Monitoring

Auto-Healing • Auto-Scaling • Cost-Effective

Architecture

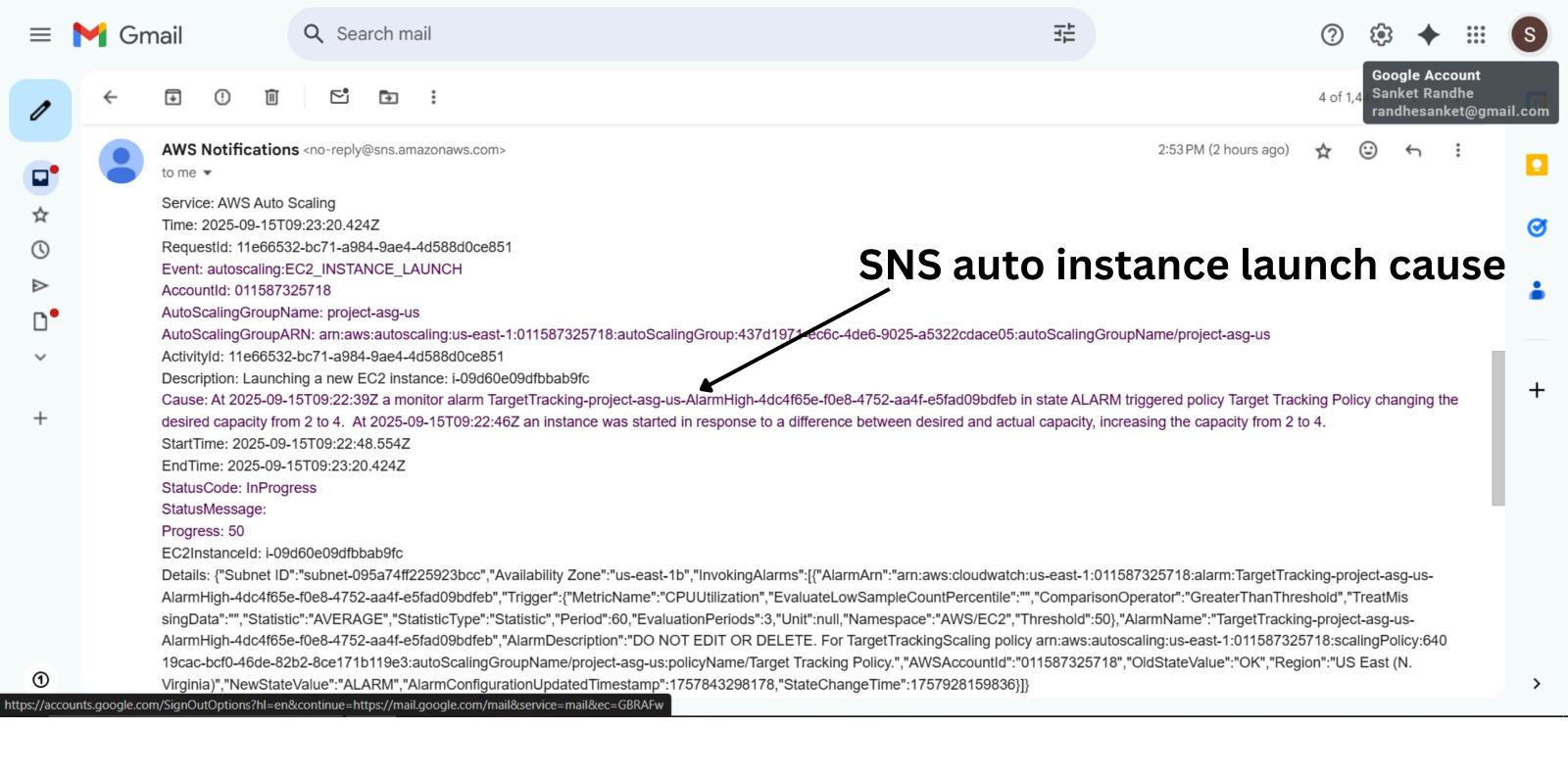
DNS name browsed and website output displayed

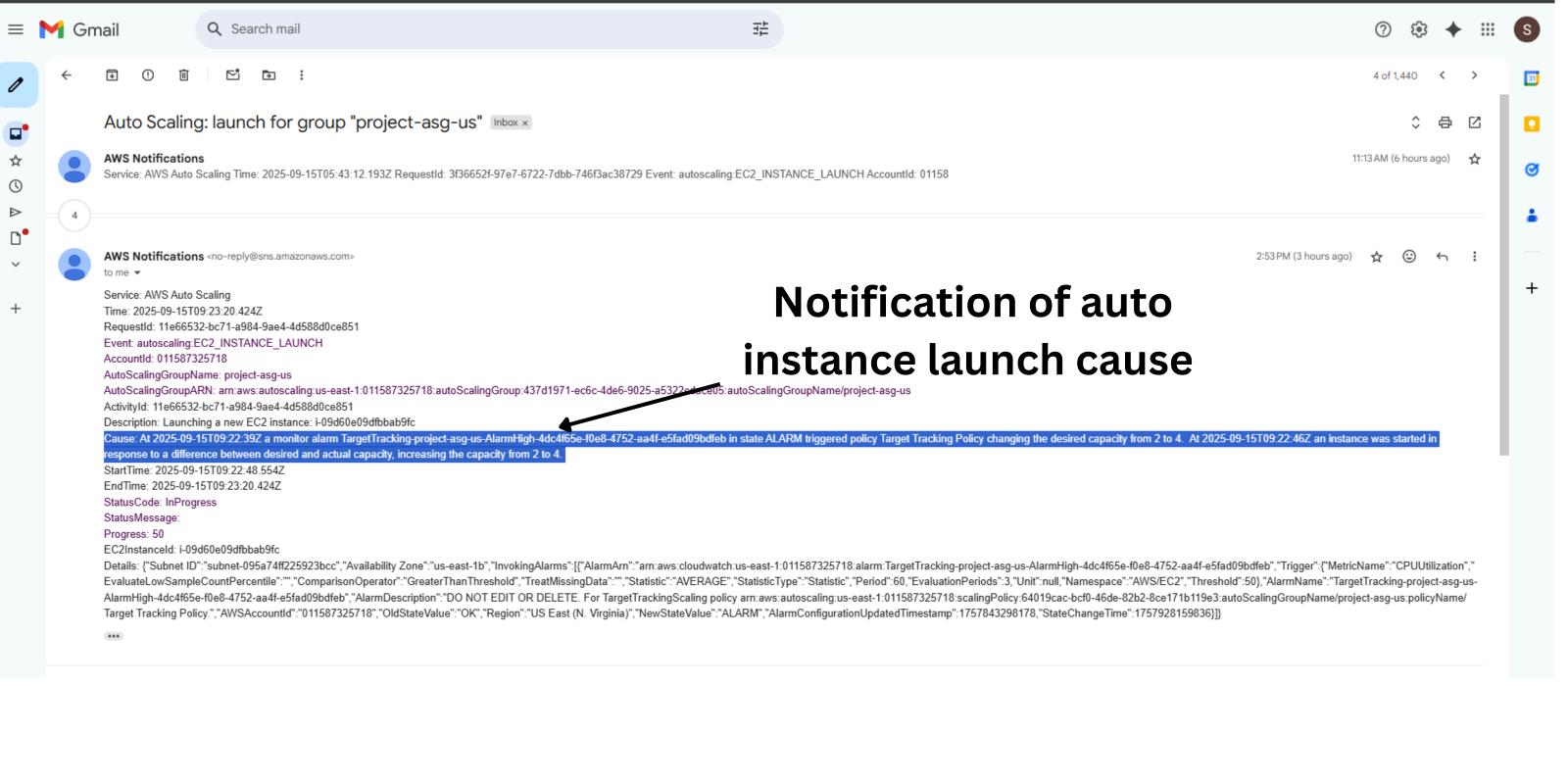


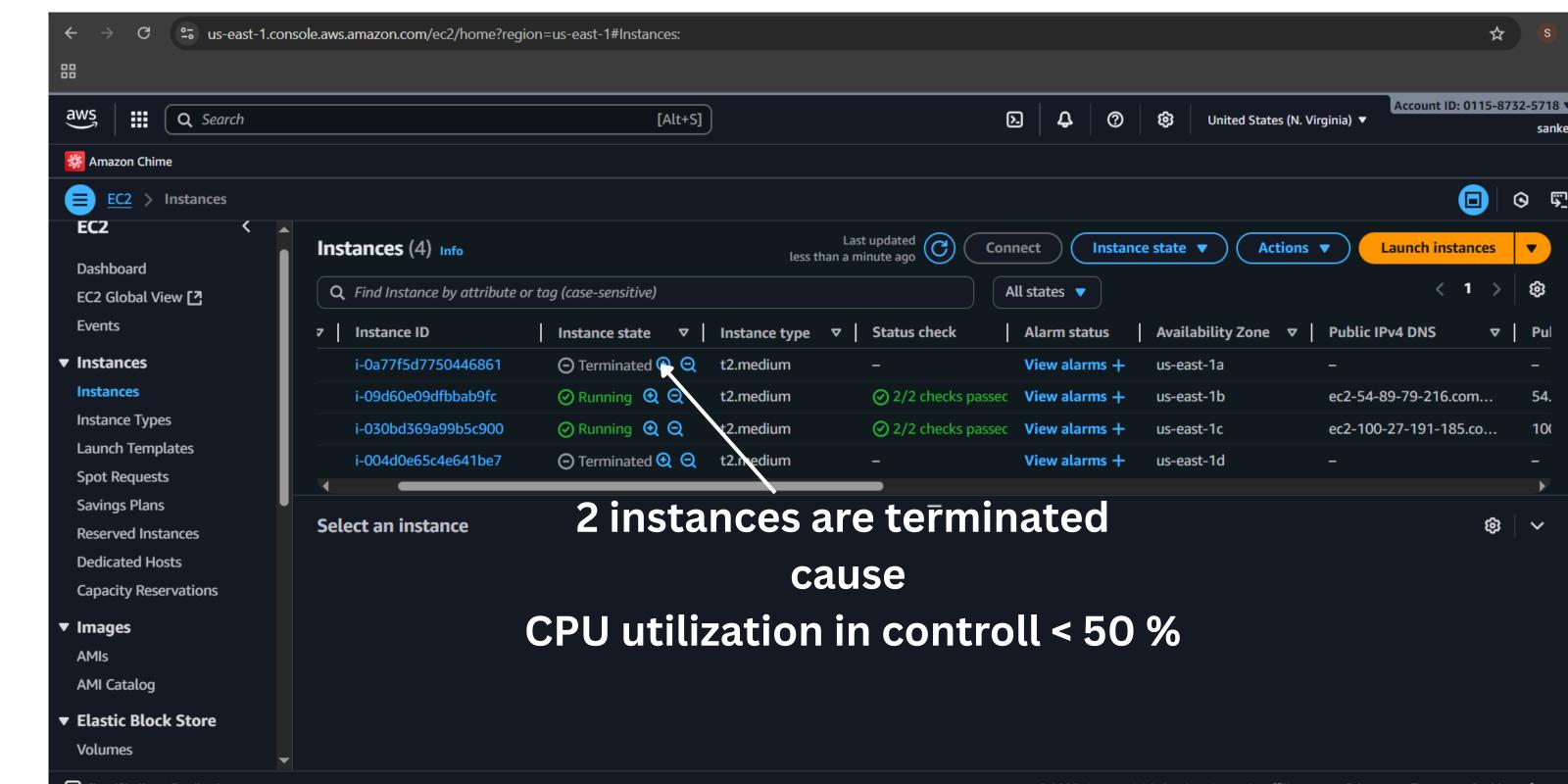
Cost Effectiveness

- √EC2 + Auto Scaling: Pay only for running instances, scales up/down automatically.
- √Elastic Load Balancer (ALB): Routes traffic efficiently, no idle server costs.
- √S3: Very low-cost static hosting, pay per GB used.
- √SNS: Cheap, serverless notifications, pay per message.
- ✓Lambda: Pay per execution, no server cost, effective for monitoring.
- √ EventBridge: Low-cost scheduling, triggers Lambda without servers.
- √ Find Idle Resources + Notify on Mail
 ip-10-0-3-191.ec2.internal

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to me .

Service: AWS Auto Scaling Time: 2025-09-15T09:52:27.294Z

Requestld: 33b51e19-1cdd-46ec-9283-d020957107f8 Event: autoscaling:EC2 INSTANCE TERMINATE

Accountld: 011587325718

AutoScalingGroupName: project-asg-us

AutoScalingGroupARN: arn:aws:autoscaling:us-east-1:011587325718:autoScalingGroup:437d1971-ec6c-4de6-9025-a5322c

dace05:autoScalingGroupName/project-asg-us

Activityld: 33b51e19-1cdd-46ec-9283-d020957107f8

Description: Terminating EC2 instance: i-0a77f5d7750446861

Cause: At 2025-09-15T09:46:33Z a monitor alarm TargetTracking-project-asg-us-AlarmLow-60b55dd3-be09-4f5c-8a0ef0136eecd431 in state ALARM triggered policy Target Tracking Policy changing the desired capacity from 3 to 2. At 2025-09-15T09:46:44Z an instance was taken out of service in response to a difference between desired and actual capacity, shrinking the capacity from 3 to 2. At 2025-09-15T09:46:44Z instance i-0a77f5d7750446861 was selected for termination

StartTime: 2025-09-15T09:46:44.909Z EndTime: 2025-09-15T09:52:27.294Z

StatusCode: InProgress

StatusMessage: Progress: 50

EC2Instanceld: i-0a77f5d7750446861

Details: {"Subnet ID":"subnet-03c27224550e9d165","Availability Zone":"us-east-1a","InvokingAlarms":[{"AlarmArn":"arn:aws: cloudwatch:us-east-1:011587325718:alarm:TargetTracking-project-asg-us-AlarmLow-60b55dd3-be09-4f5c-8a0ef0136eecd431","Trigger":{"MetricName":"CPUUtilization","EvaluateLowSampleCountPercentile":"","ComparisonOperator":"L essThanThreshold","TreatMissingData":"","Statistic":"AVERAGE","StatisticType":"Statistic","Period":60," EvaluationPeriods":15,"Unit":null,"Namespace":"AWS/EC2","Threshold":35},"AlarmName":"TargetTracking-project-asg-us-AlarmLow-60b55dd3-be09-4f5c-8a0e-f0136eecd431","AlarmDescription":"DO NOT EDIT OR DELETE. For TargetTrackingScaling policy arn:aws:autoscaling:us-east-1:011587325718:scalingPolicy:64019cac-bcf0-46de-82b2-8ce171b11 9e3:autoScalingGroupName/project-asg-us:policyName/Target Tracking Policy.","AWSAccountId":"01158 7325718", "OldStateValue": "ALARM", "Region": "US East (N. Virginia)", "NewStateValue": "ALARM", "AlarmConfigurationUpdate dTimestamp":1757929503810,"StateChangeTime":1757929503641}]}

Notification by AWS 2 instances are terminated cause

88

CPU utilization oin 9:250 the result of 16 %

Event: autoscaling:EC2_INSTANCE_TERMINATE

Accountld: 011587325718

AutoScalingGroupName: project-asg-us

AutoScalingGroupARN: arn:aws:autoscaling:us-east-1:011587325718:autoScalingGroup:437d1971-ec6c-4de6-9025-a5322c

dace05:autoScalingGroupName/project-asg-us

ActivityId: 9c999cb0-5a61-4714-8230-bca1e6311bd7

Description: Terminating EC2 instance: i-004d0e65c4e641be7

Cause: At 2025-09-15T09:45:03Z a monitor alarm TargetTracking-project-asg-us-AlarmLow-60b55dd3-be09-4f5c-8a0ef0136eecd431 in state ALARM triggered policy Target Tracking Policy changing the desired capacity from 4 to 3. At 2025-09-

15T09:45:16Z an instance was taken out of service in response to a difference between desired and actual capacity, shrinking

the capacity from 4 to 3. At 2025-09-15T09:45:16Z instance i-004d0e65c4e641be7 was selected for termination

StartTime: 2025-09-15T09:45:16.441Z EndTime: 2025-09-15T09:50:58 9497

StatusCode: InProgress

StatusMessage: Progress: 50

EC2Instanceld: i-004d0e65c4e641be7

Details: {"Subnet ID": "subnet-0c1f6186f356159ad", "Availability Zone": "us-east-1d", "InvokingAlarms": [{"AlarmArn": "arn:aws:

cloudwatch:us-east-1:011587325718:alarm:TargetTracking-project-asg-us-AlarmLow-60b55dd3-be09-4f5c-8a0e-

f0136eecd431","Trigger":{"MetricName":"CPUUtilization","EvaluateLowSampleCountPercentile":"","ComparisonOperator":"L

essThanThreshold","TreatMissingData":"","Statistic":"AVERAGE","StatisticType":"Statistic","Period":60,"

EvaluationPeriods":15,"Unit":null,"Namespace":"AWS/EC2","Threshold":37.5},"AlarmName":"TargetTracking-project-asg-us-

AlarmLow-60b55dd3-be09-4f5c-8a0e-f0136eecd431", "AlarmDescription": "DO NOT EDIT OR DELETE. For

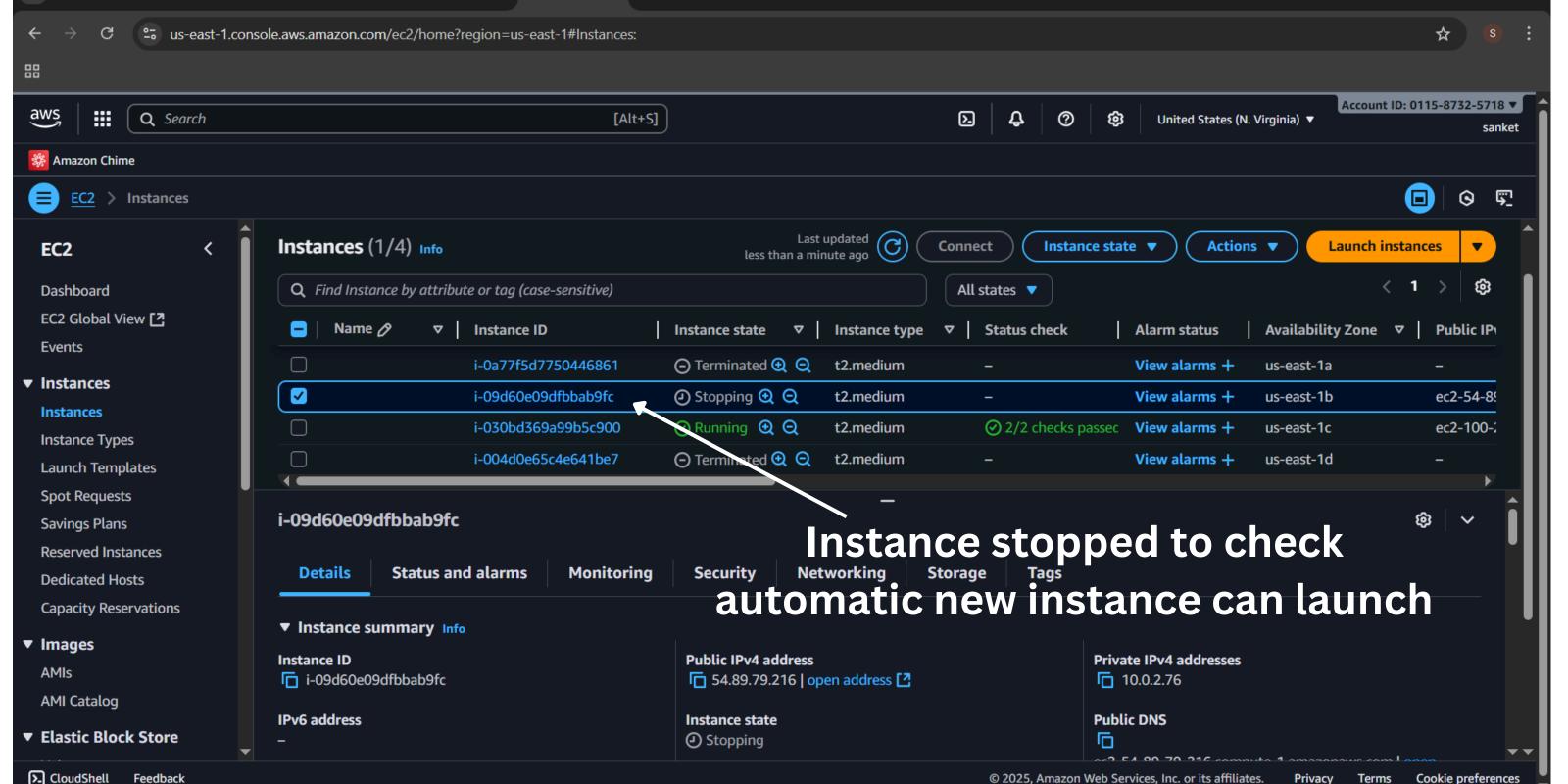
TargetTrackingScaling policy arn:aws:autoscaling:us-east-1:011587325718:scalingPolicy:64019cac-bcf0-46de-82b2-

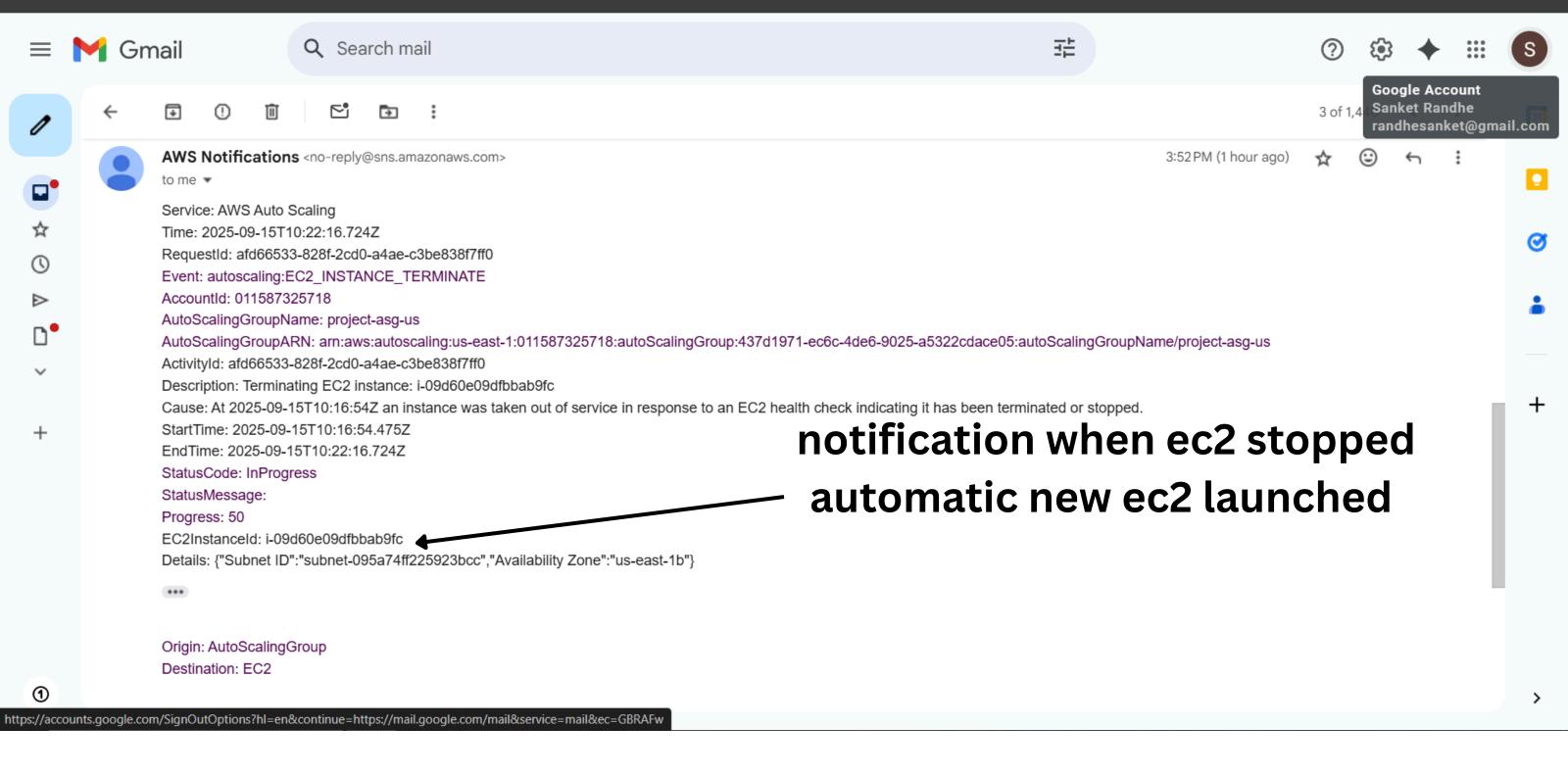
8ce171b119e3:autoScalingGroupName/project-asg-us:policyName/Target Tracking Policy.","AWSAccountId":"01158 7325718","OldStateValue":"OK","Region":"US East (N. Virginia)","NewStateValue":"ALARM","AlarmConfigurationUpdate

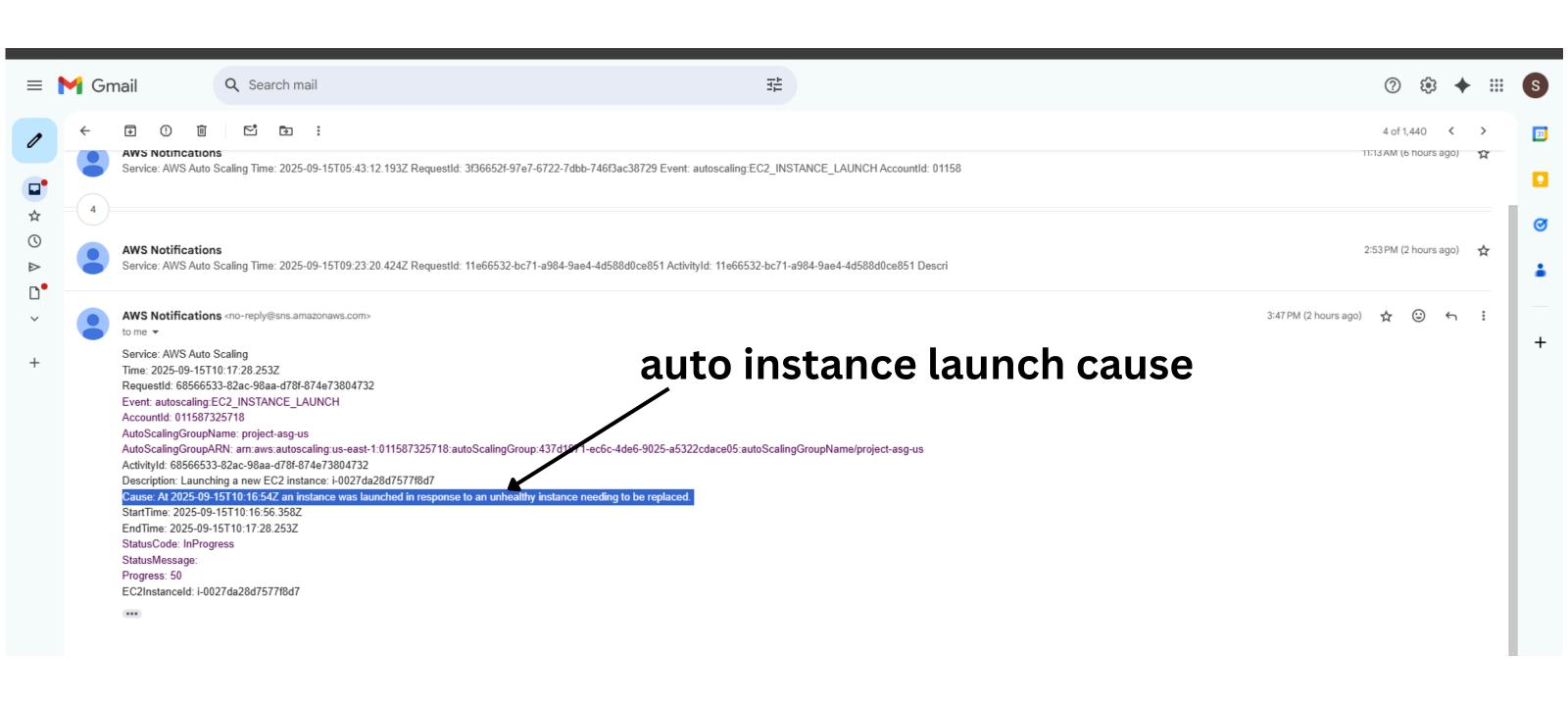
dTimestamp":1757928159983,"StateChangeTime":1757929503641}]}

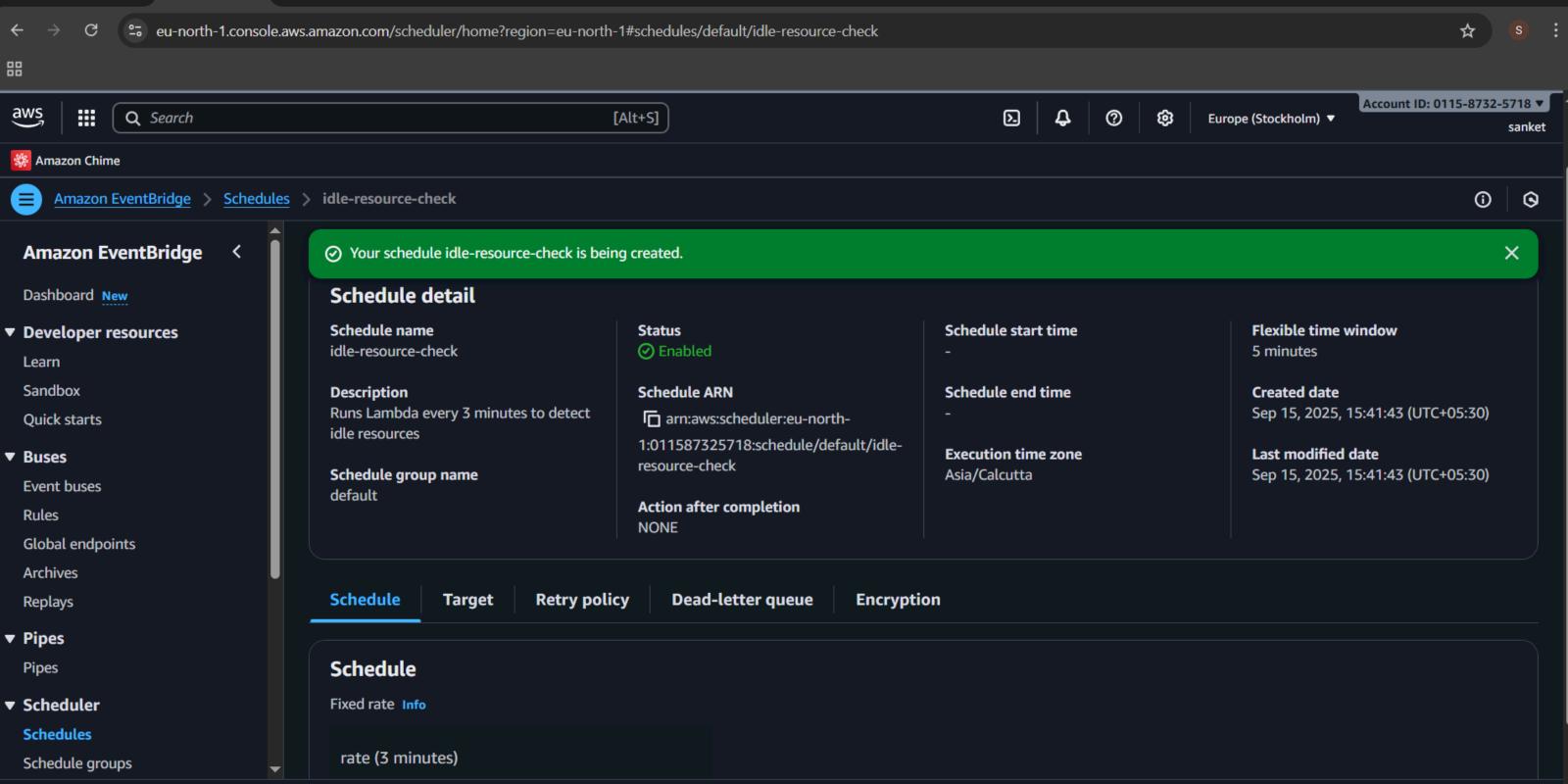
Origin: AutoScalingGroup

Destination: EC2









Unattached Flastic IP: 3.220.77.162 Idle AWS Resources Detected Inbox x NAT Gateway Active: nat-054b726c2f5c4fb9a (Costly) AWS Notifications <no-reply@sns.amazonaws.com> ideal resouces list ALB with no targets: lb Sep 15, 2025, 3:57 PM Empty S3 Bucket: test-empty-bkt Unattached Elastic IP: 3.220.77.162 NAT Gateway Active: nat-054b726c2f5c4fb9a (Costly) ALB with no targets: Ib Empty S3 Bucket: test-empty-bkt If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe: https://sns.us-east-1.amazonaws.com/unsubscribe.html?SubscriptionArn=arn:aws:sns:us-east-1:011587325718;cost-alerts:47ebe16e-ce04-47b9-84f1-e9a3ba473013&Endpoint=randhesanket@gmail.com Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at https://aws.amazon.com/support Unattached Elastic IP: 3.220.77.162 AWS Notifications <no-reply@sns.amazonaws.com: Sep 15, 2025, 3:59 PM ALB deleted List after, NAT Gateway Active: nat-054b726c2f5c4fb9a (Costly) 3 min auto lambda triggered Unattached Elastic IP: 3.220.77.162 Empty S3 Bucket: test-empty-bkt NAT Gateway Active: nat-054b726c2f5c4fb9a (Costly) Empty S3 Bucket: test-empty-bkt If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe: https://sns.us-east-1.amazonaws.com/unsubscribe.html?SubscriptionArn=arn;aws;sns;us-east-1:011587325718;cost-alerts:47ebe16e-ce04-47b9-84f1-e9a3ba473013&Endpoint=randhesanket@gmail.com Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at https://aws.amazon.com/support AWS Notifications on reply@sns. NATw&S3-bkt deleted, List after 3 min auto lambda triggered Sep 15, 2025, 4:02 PM (Unattached Elastic IP: 3.220.77.162 Unattached Elastic IP: 3.220.77.162