SNS SES CloudWatch

1. **Monitor Your Estimated Charges Using CloudWatch**

Step 1: Enable Billing Alerts

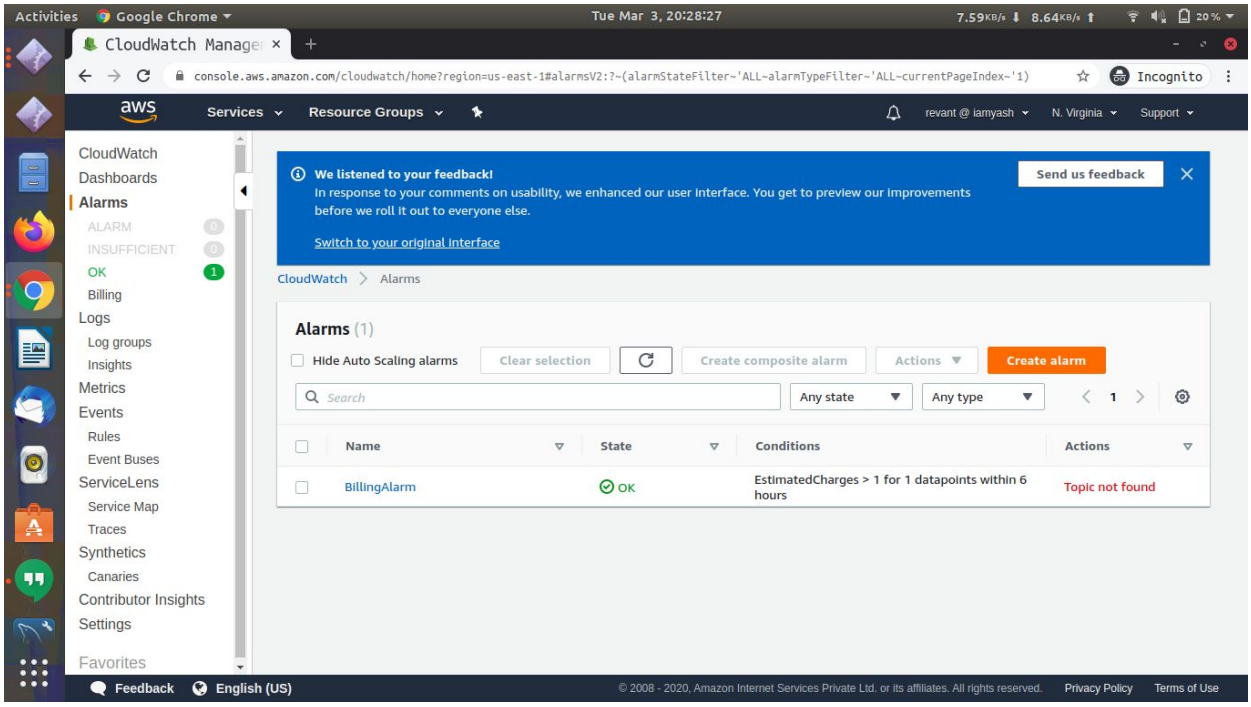
Step 2: Create a Billing Alarm

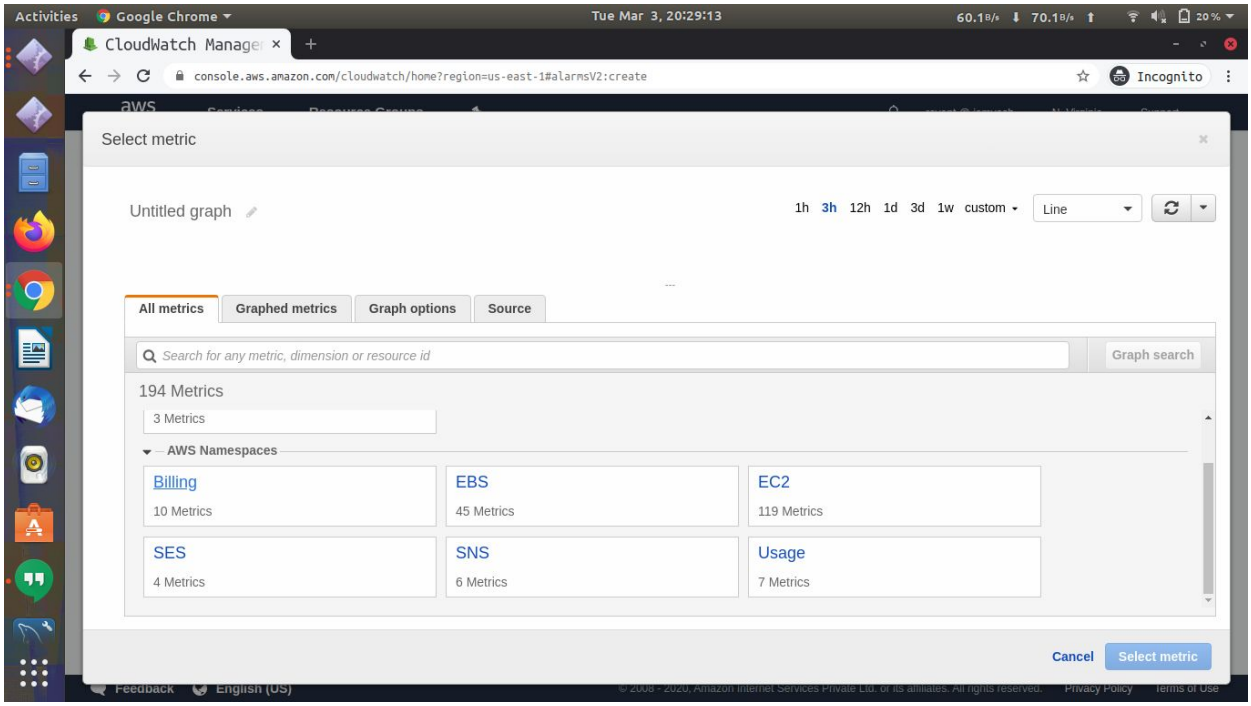
Step 3: Check the Alarm Status

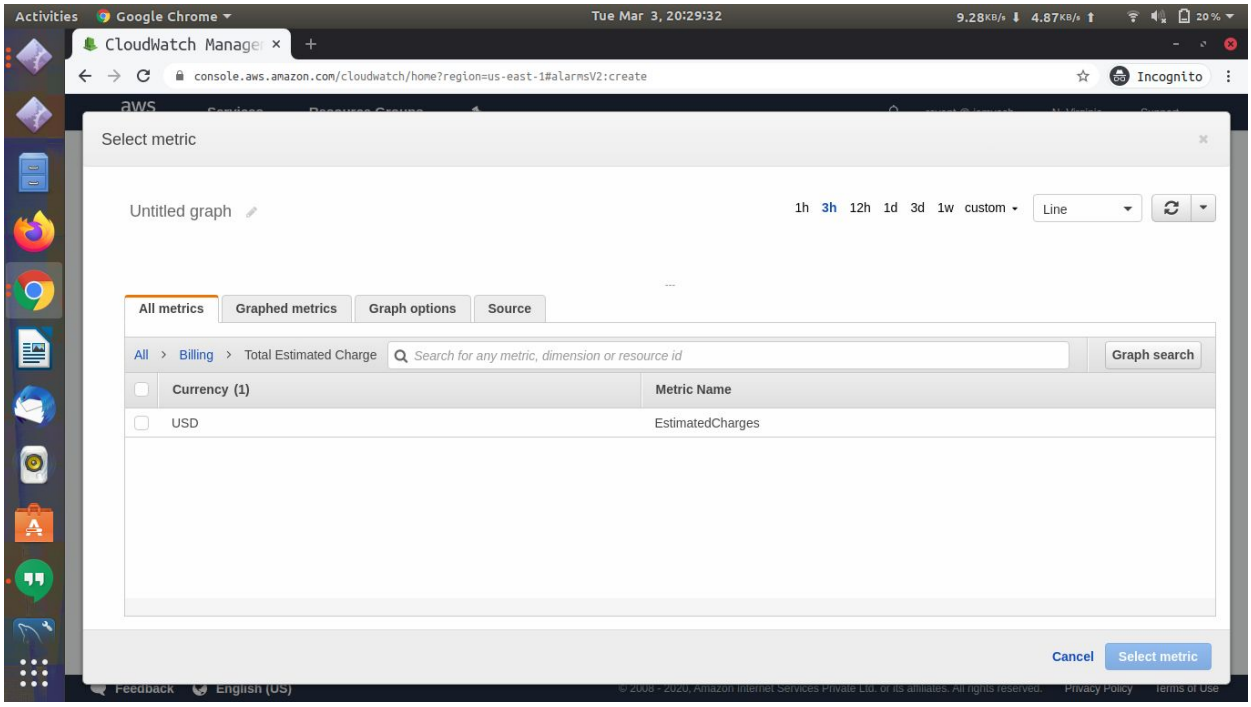
Step 4: Create & Subscribe to SNS Topic

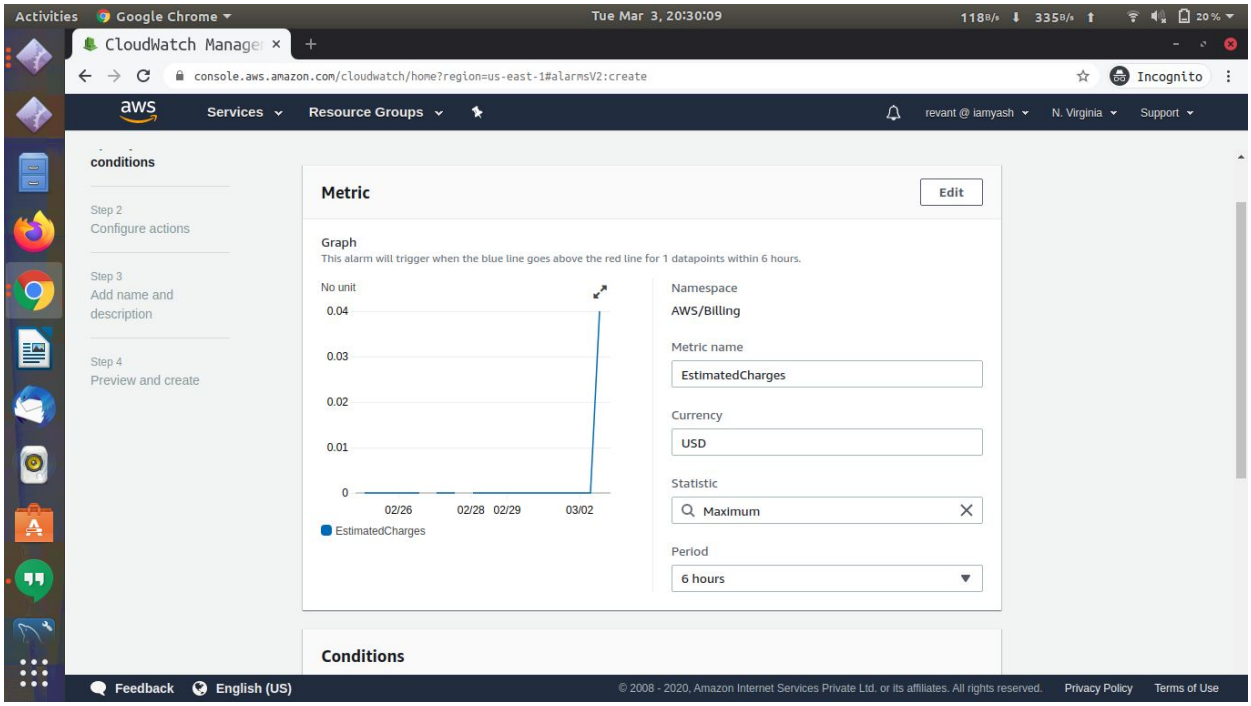
Step 5: Send a notification to all the stakeholder, if AWS resource pricing reaches the threshold value.

Create Alarm

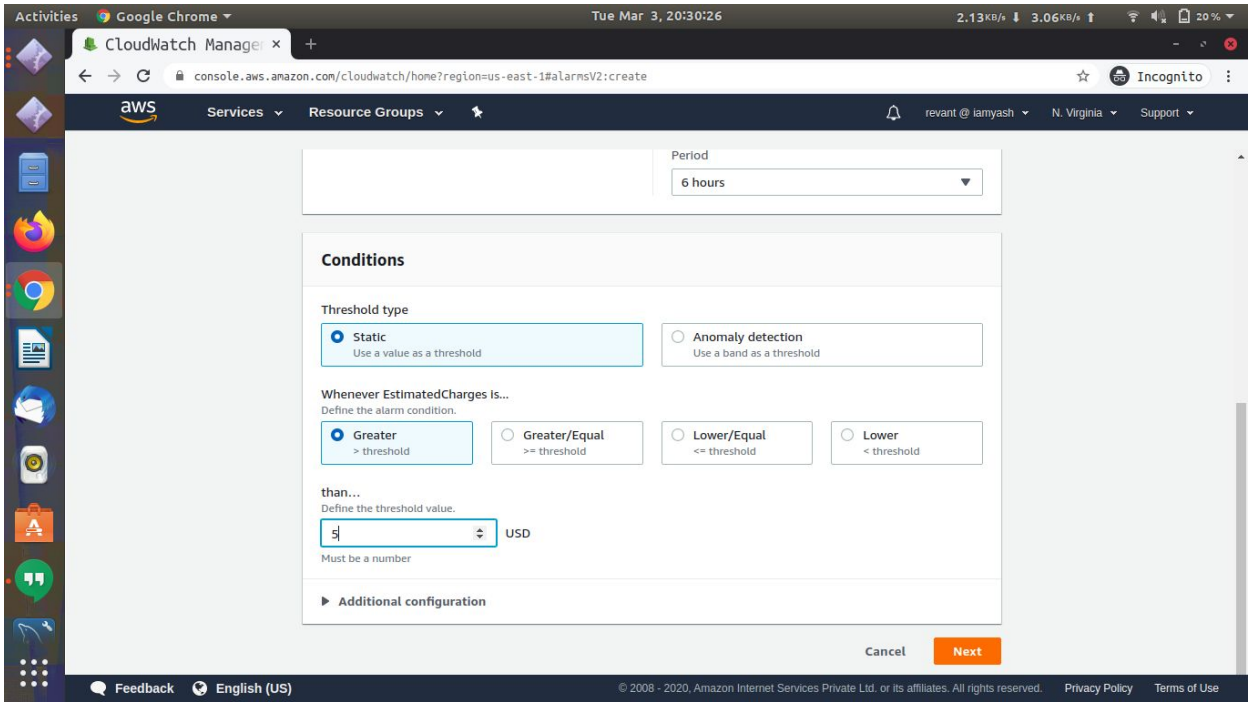

Activities
Google Chrome
Tue Mar 3, 20:28:27
CloudWatch Manage
console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:?~(alarmStateFilter~'ALL~alarmTypeFilter~'ALL~currentPageIndex~'1)
Incognito
aws
Services
Resource Groups
revant @ iamyash
N. Virginia
Support
CloudWatch
Dashboards
Alarms
ALARM
INSUFFICIENT
OK
Billing
Logs
Log groups
Insights
Metrics
Events
Rules
Event Buses
ServiceLens
Service Map
Traces
Synthetics
Canaries
Contributor Insights
Settings
Favorites
We listened to your feedback!
In response to your comments on usability, we enhanced our user interface. You get to preview our improvements before we roll it out to everyone else.
Switch to your original interface
Send us feedback
CloudWatch > Alarms
Alarms (1)
Hide Auto Scaling alarms
Clear selection
Create composite alarm
Actions
Create alarm
Search
Any state
Any type
Name
State
Conditions
Actions
BillingAlarm
OK
EstimatedCharges > 1 for 1 datapoints within 6 hours
Topic not found
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

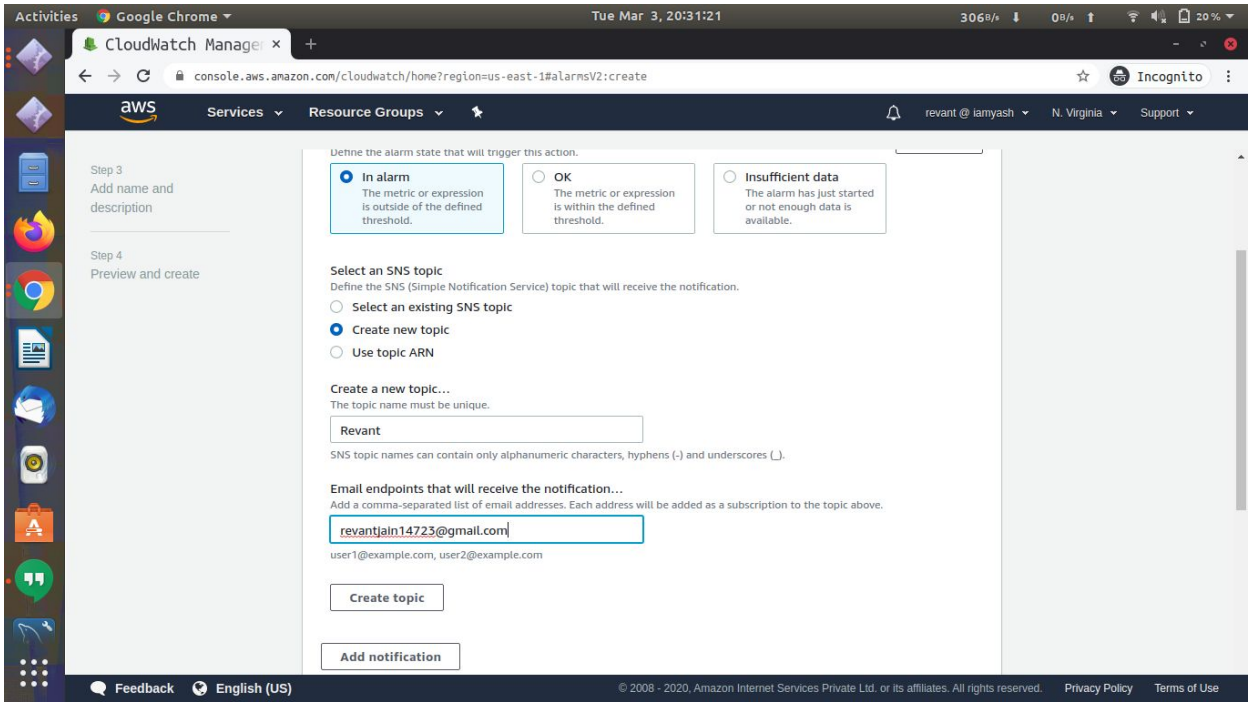

Activities
Google Chrome
Tue Mar 3, 20:29:13
CloudWatch Manage
console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create
Incognito
Select metric
Untitled graph
1h
3h
12h
1d
3d
1w
custom
Line
All metrics
Graphed metrics
Graph options
Source
Search for any metric, dimension or resource id
Graph search
194 Metrics
3 Metrics
AWS Namespaces
Billing
10 Metrics
EBS
45 Metrics
EC2
119 Metrics
SES
4 Metrics
SNS
6 Metrics
Usage
7 Metrics
Cancel
Select metric
Feedback
English (US)

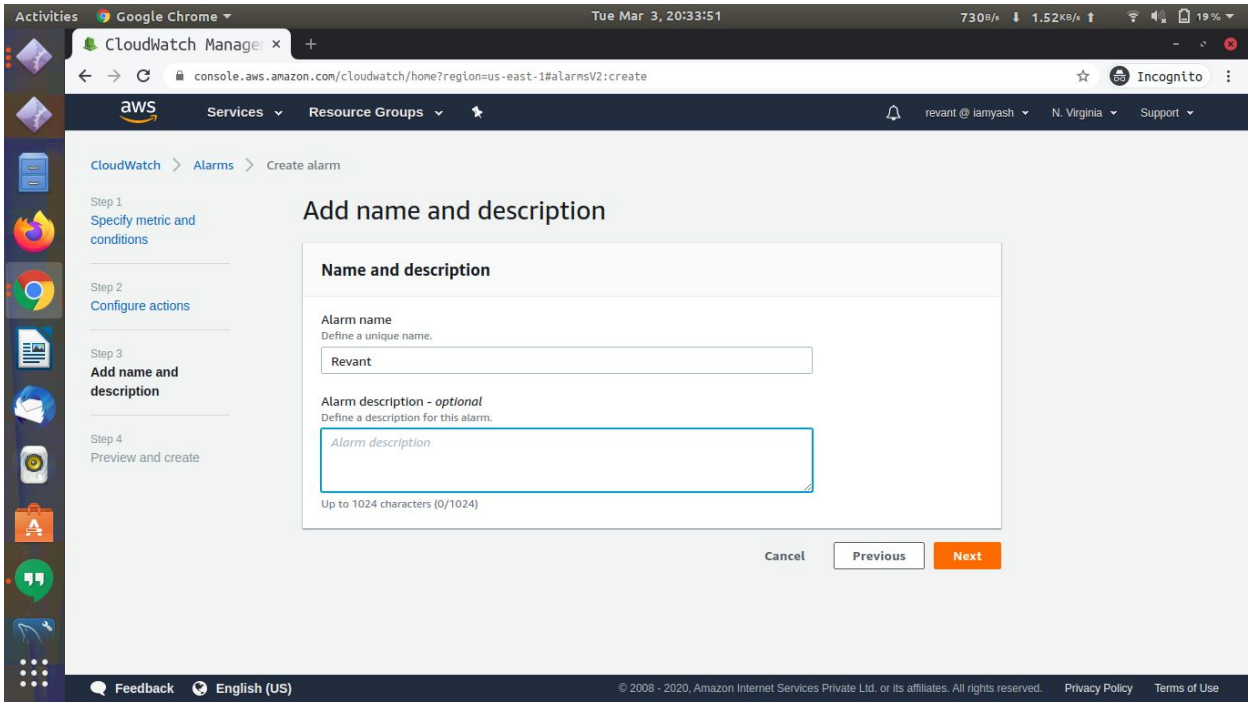


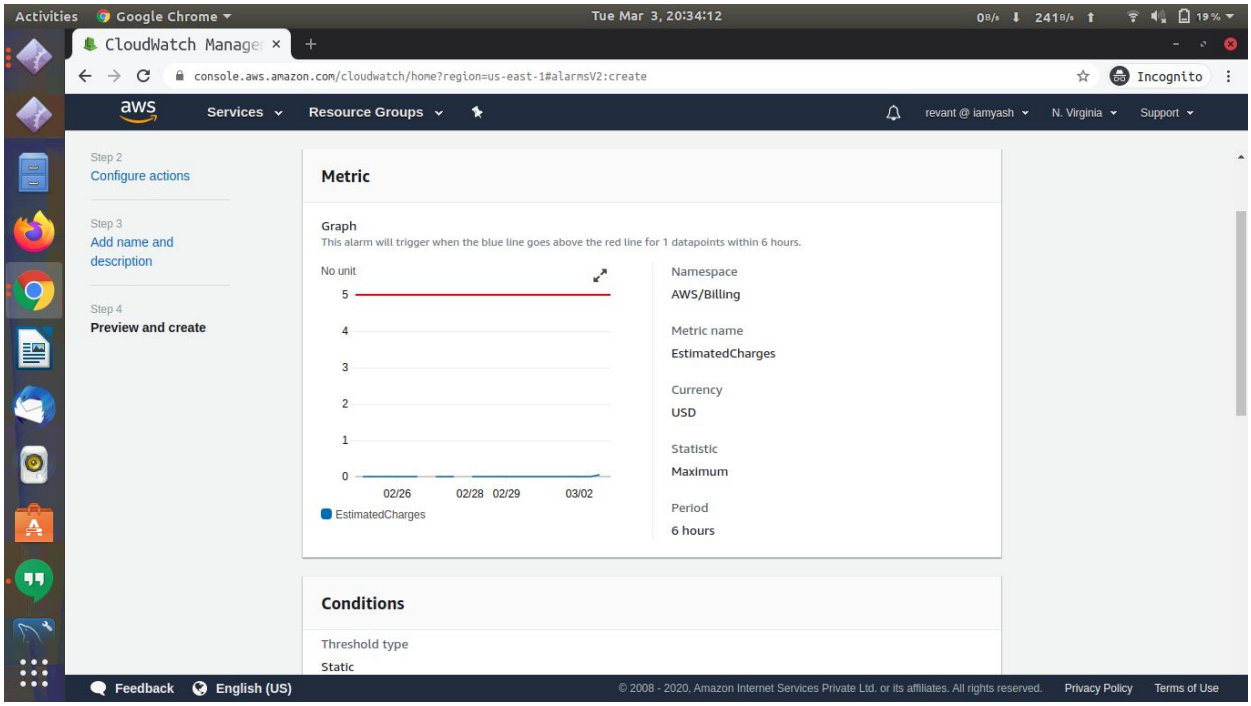


If alarm is greater than 5 USD generate alarm


Activities
Google Chrome
Tue Mar 3, 20:30:26
CloudWatch Manage
console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create
Incognito
aws
Services
Resource Groups
revant @ iamyash
N. Virginia
Support
Period
6 hours
Conditions
Threshold type
Static
Use a value as a threshold
Anomaly detection
Use a band as a threshold
Whenever EstimatedCharges is...
Define the alarm condition.
Greater
> threshold
Greater/Equal
>= threshold
Lower/Equal
<= threshold
Lower
< threshold
than...
Define the threshold value.
5
USD
Must be a number
Additional configuration
Cancel
Next
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

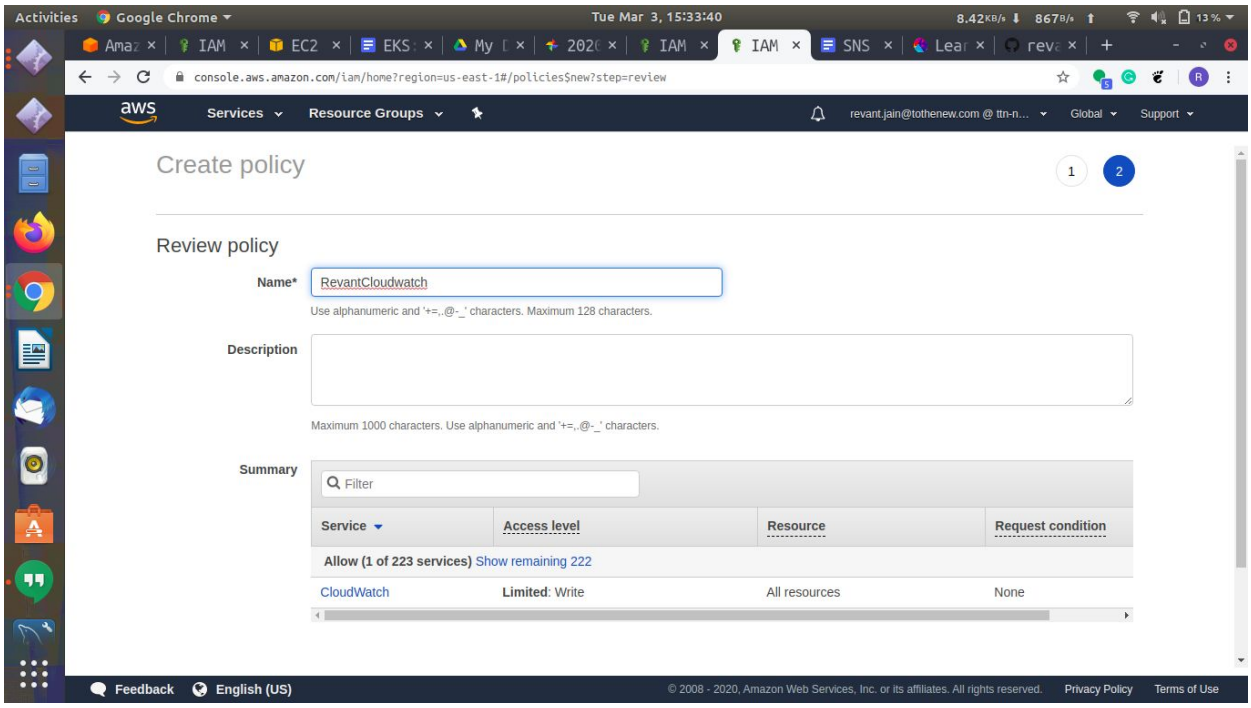

Activities
Google Chrome
Tue Mar 3, 20:31:21
CloudWatch Manage
console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create
Incognito
aws
Services
Resource Groups
revant @ iamyash
N. Virginia
Support
Step 3
Add name and description
Step 4
Preview and create
In alarm
The metric or expression is outside of the defined threshold.
OK
The metric or expression is within the defined threshold.
Insufficient data
The alarm has just started or not enough data is available.
Select an SNS topic
Define the SNS (Simple Notification Service) topic that will receive the notification.
Select an existing SNS topic
Create new topic
Use topic ARN
Create a new topic...
The topic name must be unique.
Revant
SNS topic names can contain only alphanumeric characters, hyphens (-) and underscores (_).
Email endpoints that will receive the notification...
Add a comma-separated list of email addresses. Each address will be added as a subscription to the topic above.
revantjain14723@gmail.com
user1@example.com, user2@example.com
Create topic
Add notification
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

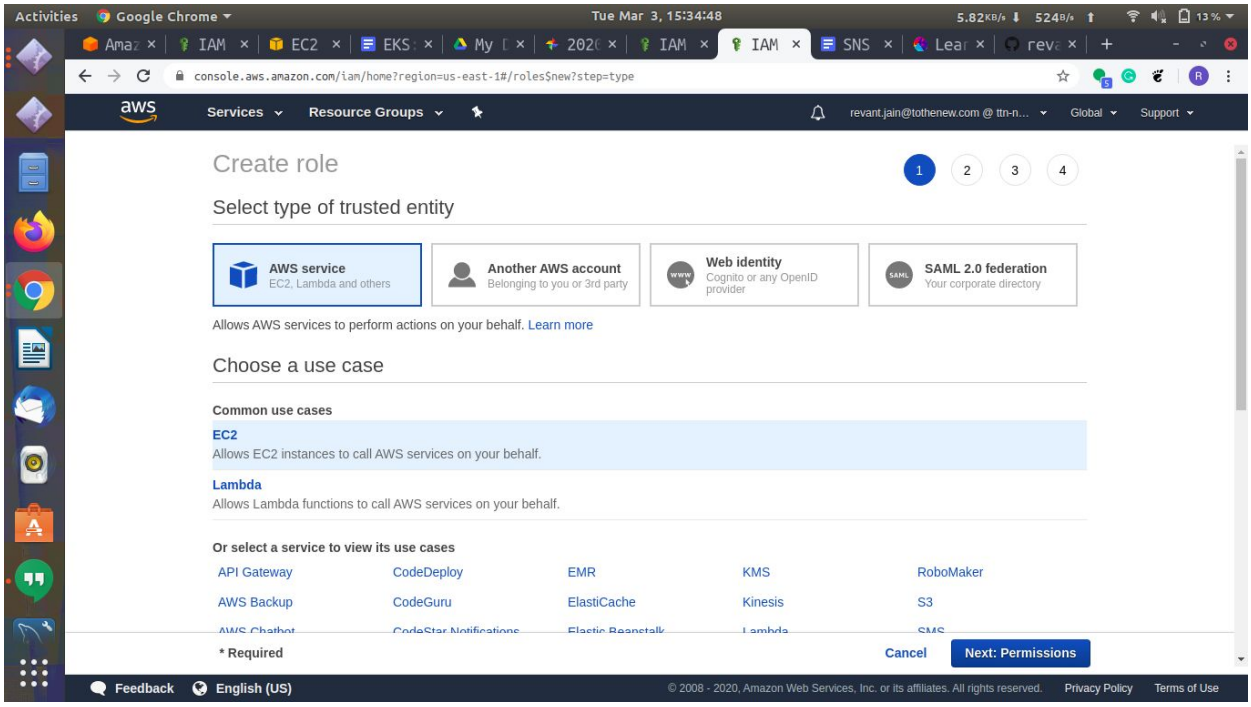

Activities
Google Chrome
Tue Mar 3, 20:33:51
CloudWatch Manage
console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create
Incognito
aws
Services
Resource Groups
revant @ iamyash
N. Virginia
Support
CloudWatch
Alarms
Create alarm
Step 1
Specify metric and conditions
Step 2
Configure actions
Step 3
Add name and description
Step 4
Preview and create
Add name and description
Name and description
Alarm name
Define a unique name.
Revant
Alarm description - optional
Define a description for this alarm.
Alarm description
Up to 1024 characters (0/1024)
Cancel
Previous
Next
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

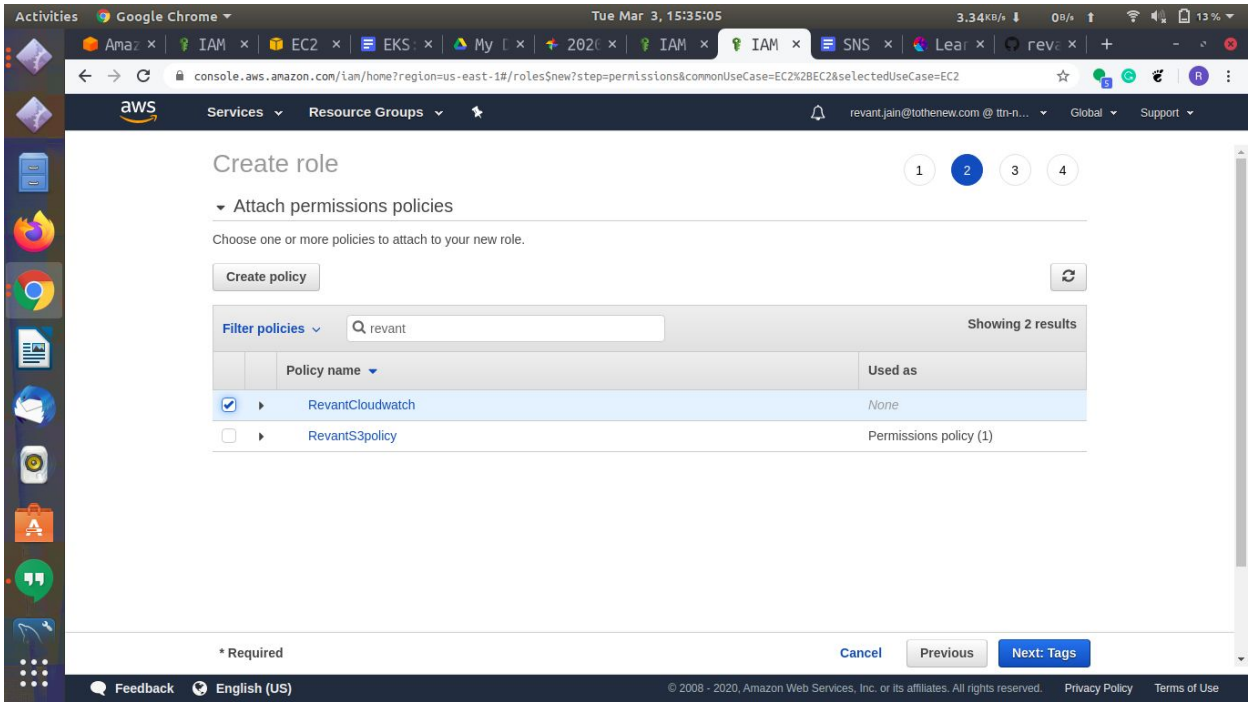

Activities
Google Chrome
Tue Mar 3, 20:34:12
CloudWatch Manage
console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create
Incognito
aws
Services
Resource Groups
revant @ iamyash
N. Virginia
Support
Step 2
Configure actions
Step 3
Add name and description
Step 4
Preview and create
Metric
Graph
This alarm will trigger when the blue line goes above the red line for 1 datapoints within 6 hours.
No unit
5
4
3
2
1
0
02/26
02/28
02/29
03/02
EstimatedCharges
Namespace
AWS/Billing
Metric name
EstimatedCharges
Currency
USD
Statistic
Maximum
Period
6 hours
Conditions
Threshold type
Static
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

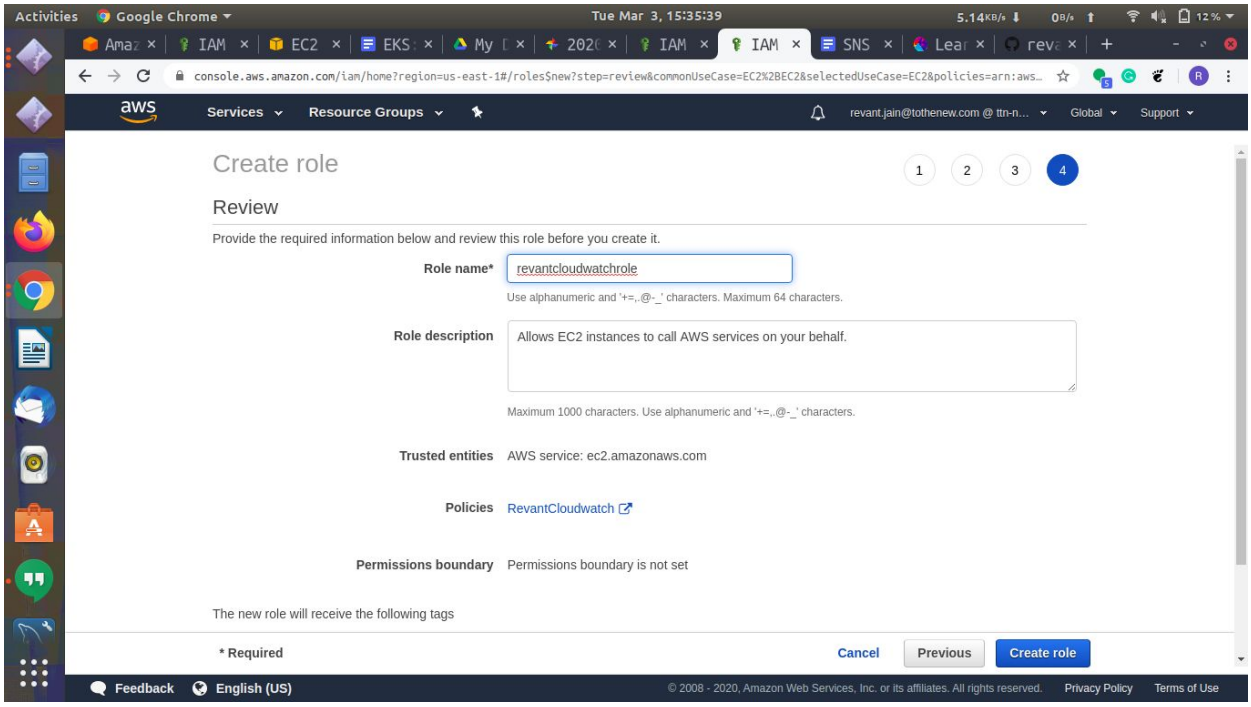
2. Create a custom Memory metric in CloudWatch and set up an alarm at 80 % which will autoscale the instance in the autoscaling group.

First create a policy for Cloudwatch metric

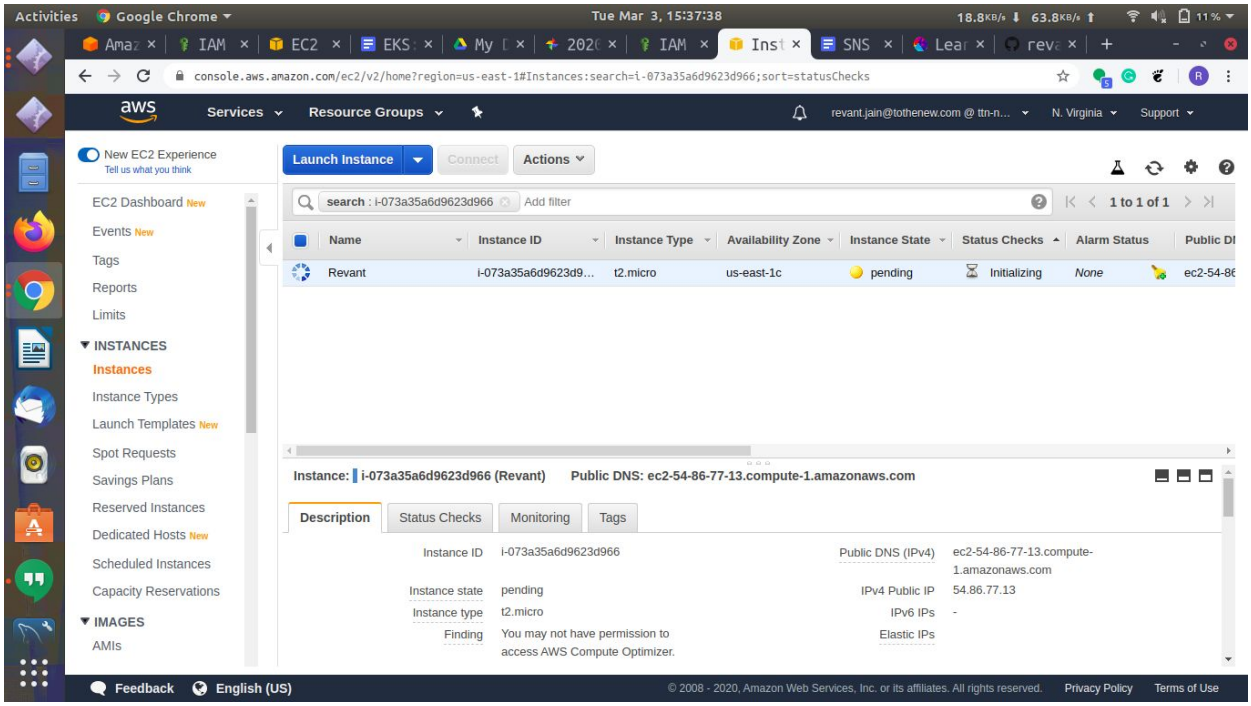



Activities
Google Chrome
Tue Mar 3, 15:34:48
console.aws.amazon.com/iam/home?region=us-east-1#/roles$new?step=type
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
Global
Support
Create role
1
2
3
4
Select type of trusted entity
AWS service
EC2, Lambda and others
Another AWS account
Belonging to you or 3rd party
Web identity
Cognito or any OpenID provider
SAML 2.0 federation
Your corporate directory
Allows AWS services to perform actions on your behalf. Learn more
Choose a use case
Common use cases
EC2
Allows EC2 instances to call AWS services on your behalf.
Lambda
Allows Lambda functions to call AWS services on your behalf.
Or select a service to view its use cases
API Gateway
CodeDeploy
EMR
KMS
RoboMaker
AWS Backup
CodeGuru
ElastiCache
Kinesis
S3
* Required
Cancel
Next: Permissions
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

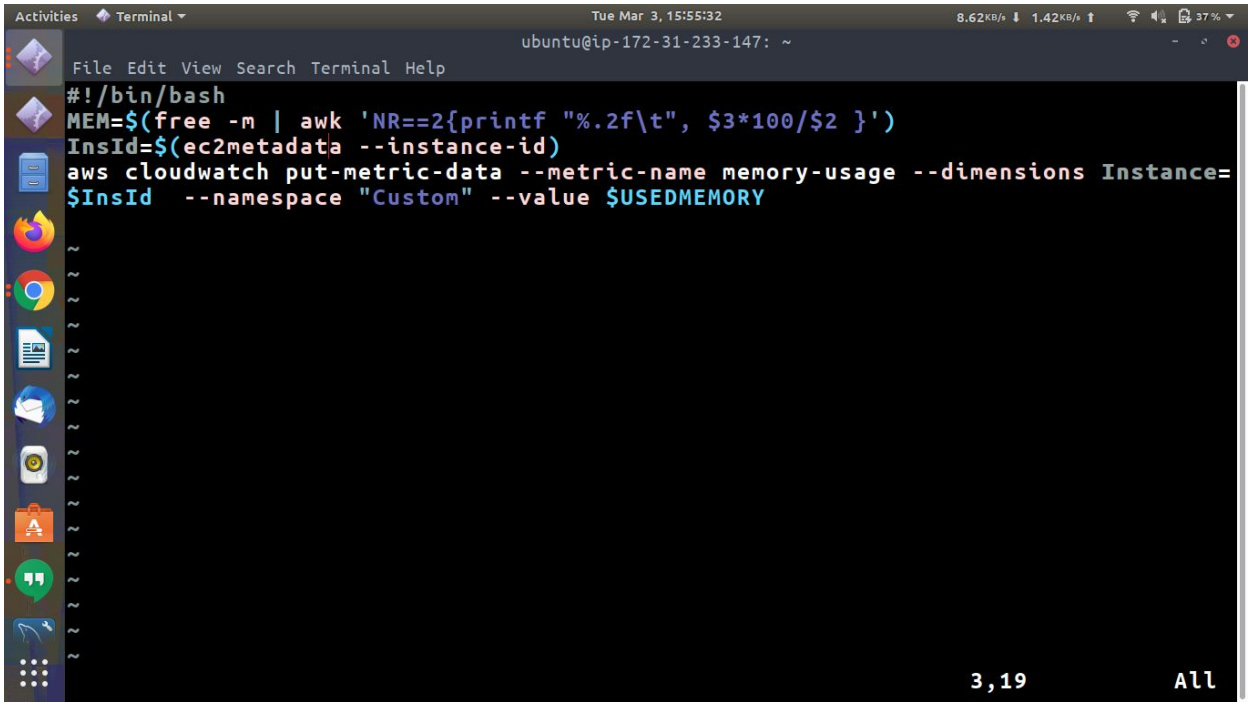

Activities
Google Chrome
Tue Mar 3, 15:35:05
console.aws.amazon.com/iam/home?region=us-east-1#/roles$new?step=permissions&commonUseCase=EC2%2BEC2&selectedUseCase=EC2
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
Global
Support
Create role
1
2
3
4
Attach permissions policies
Choose one or more policies to attach to your new role.
Create policy
Filter policies
revant
Showing 2 results
Policy name
Used as
RevantCloudwatch
None
RevantS3policy
Permissions policy (1)
* Required
Cancel
Previous
Next: Tags
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use



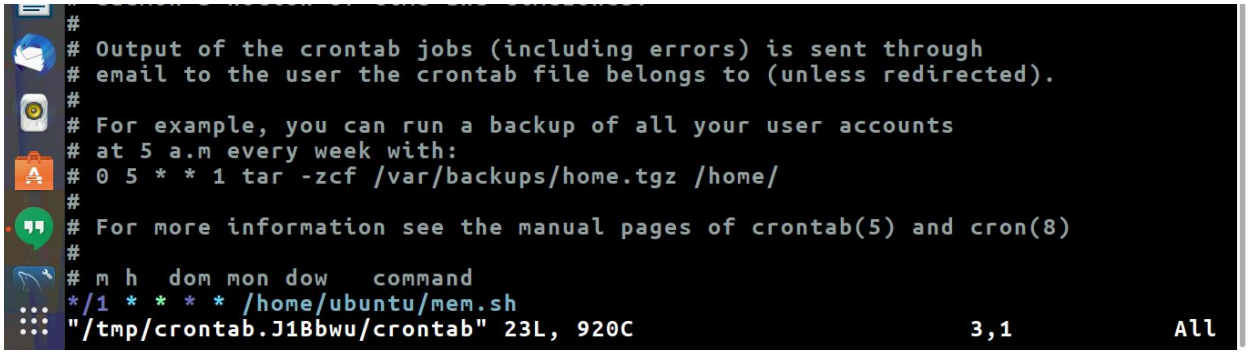
Then create an Ec2 instance



SSh into that particular instance and create a metric of memory

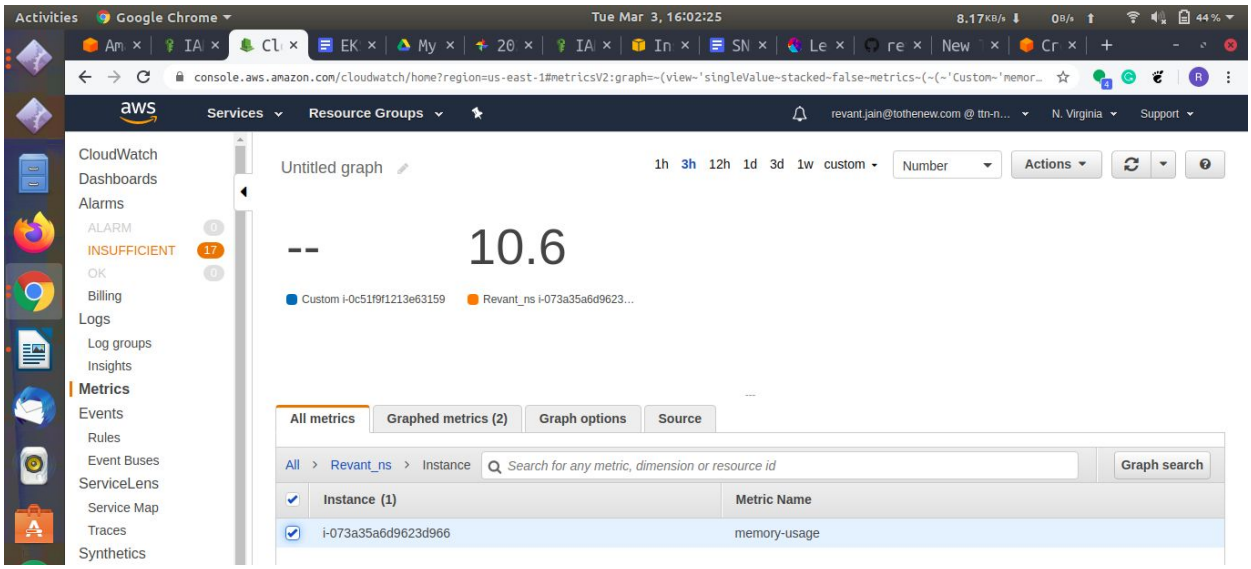


Giving a cron that will run that particular script every minute

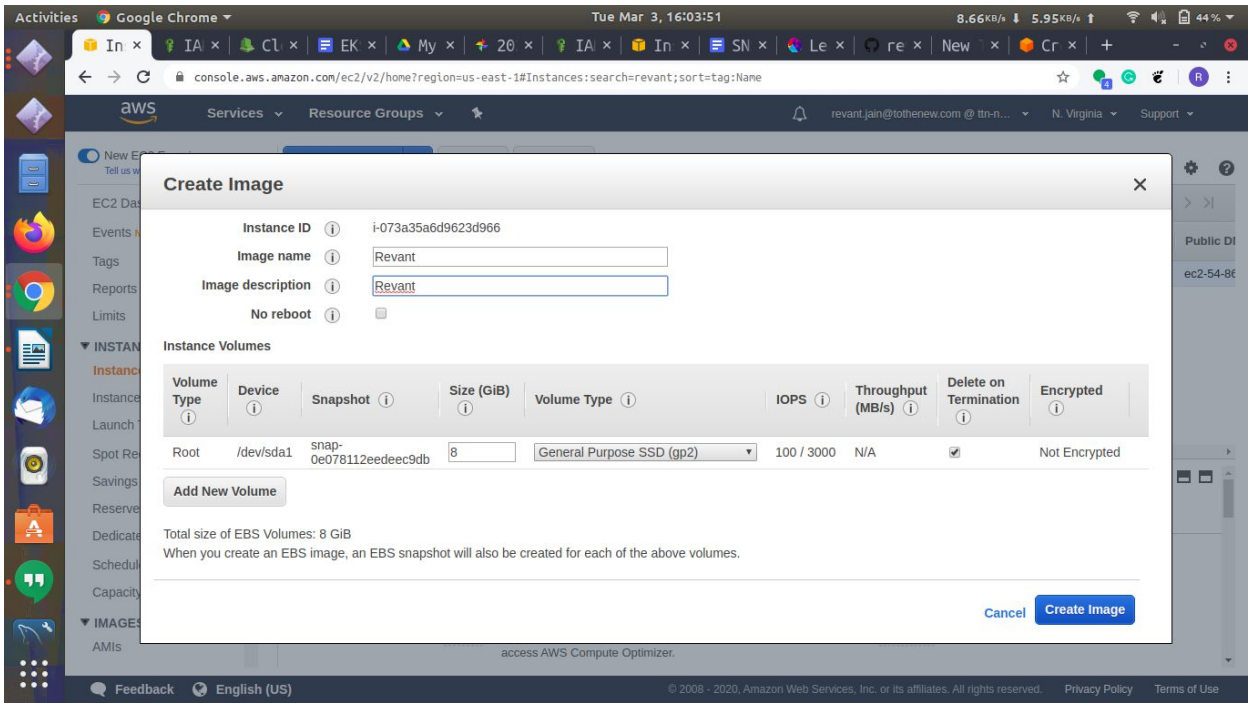


Namespace -revantns

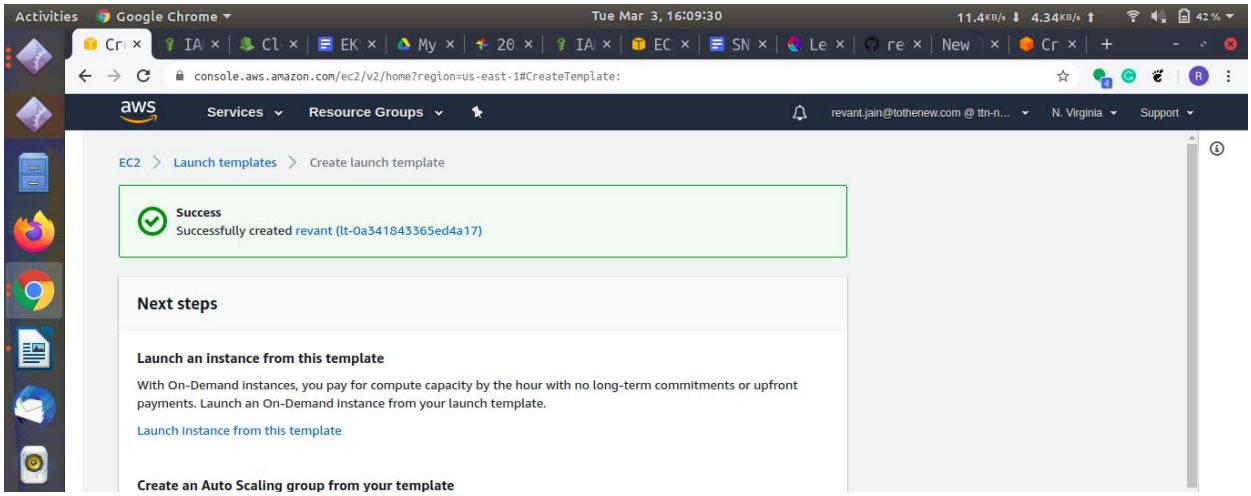
Metric - memory usage

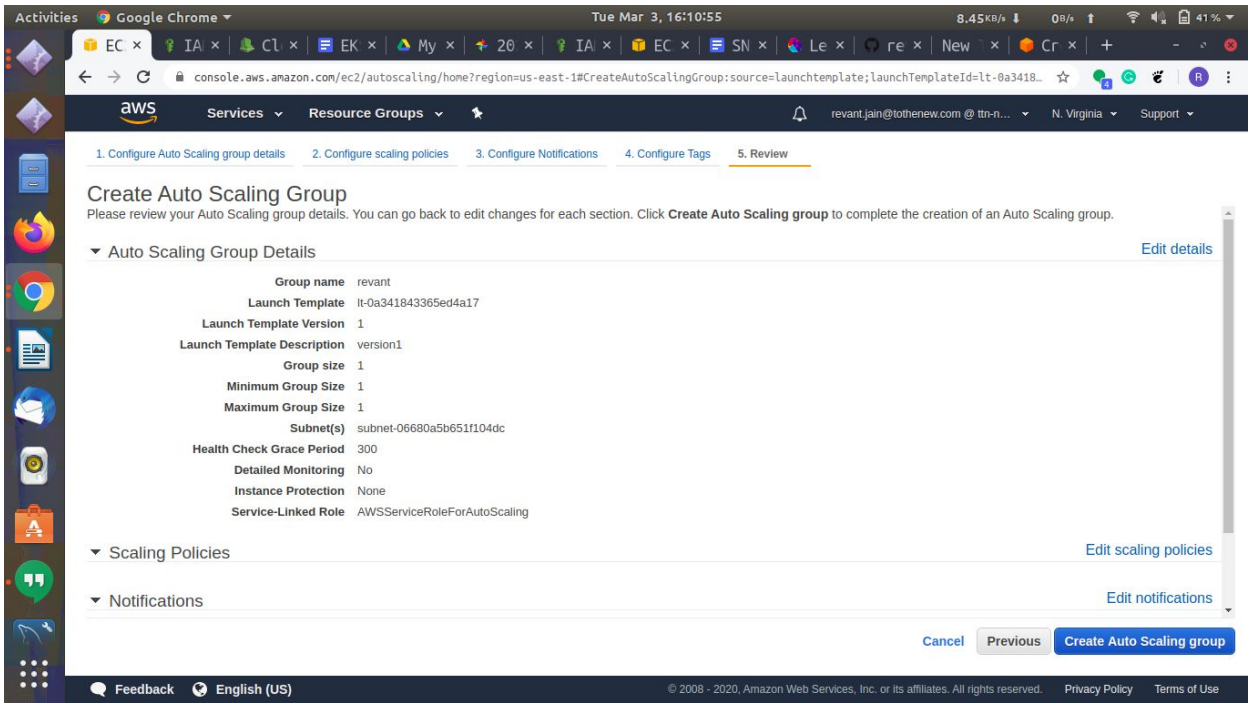


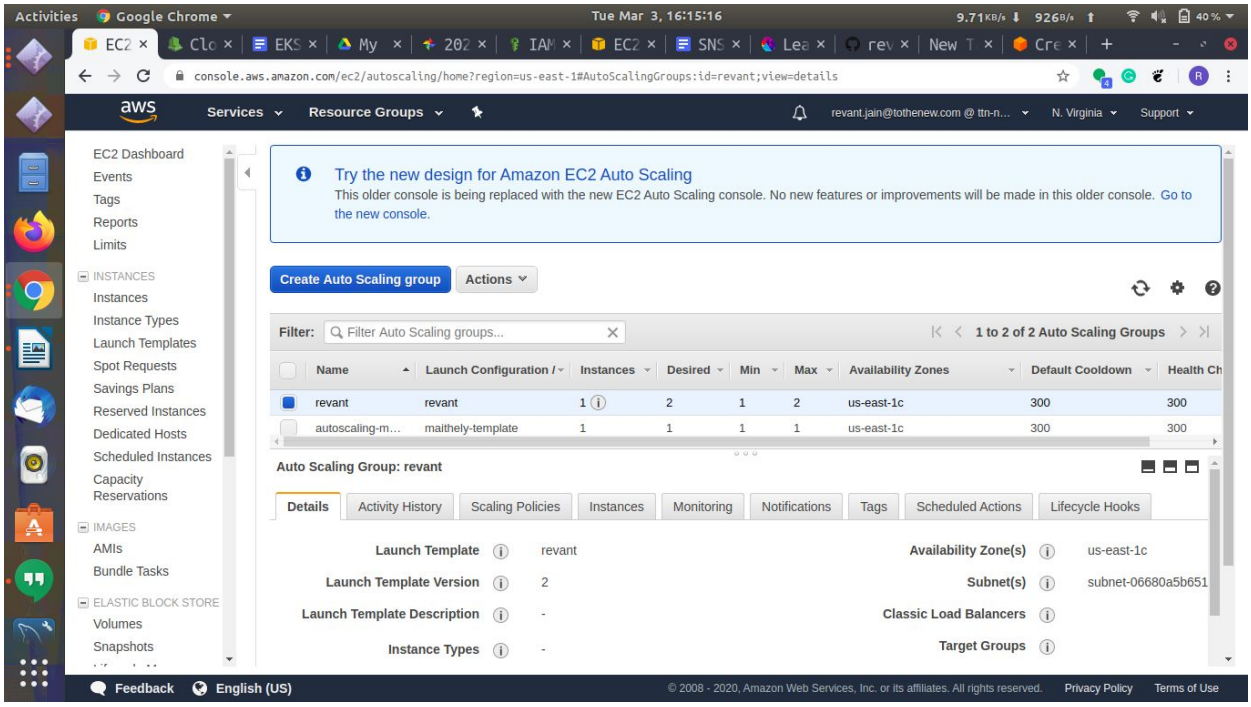
Now create ami of this instance and use it in autoscaling group

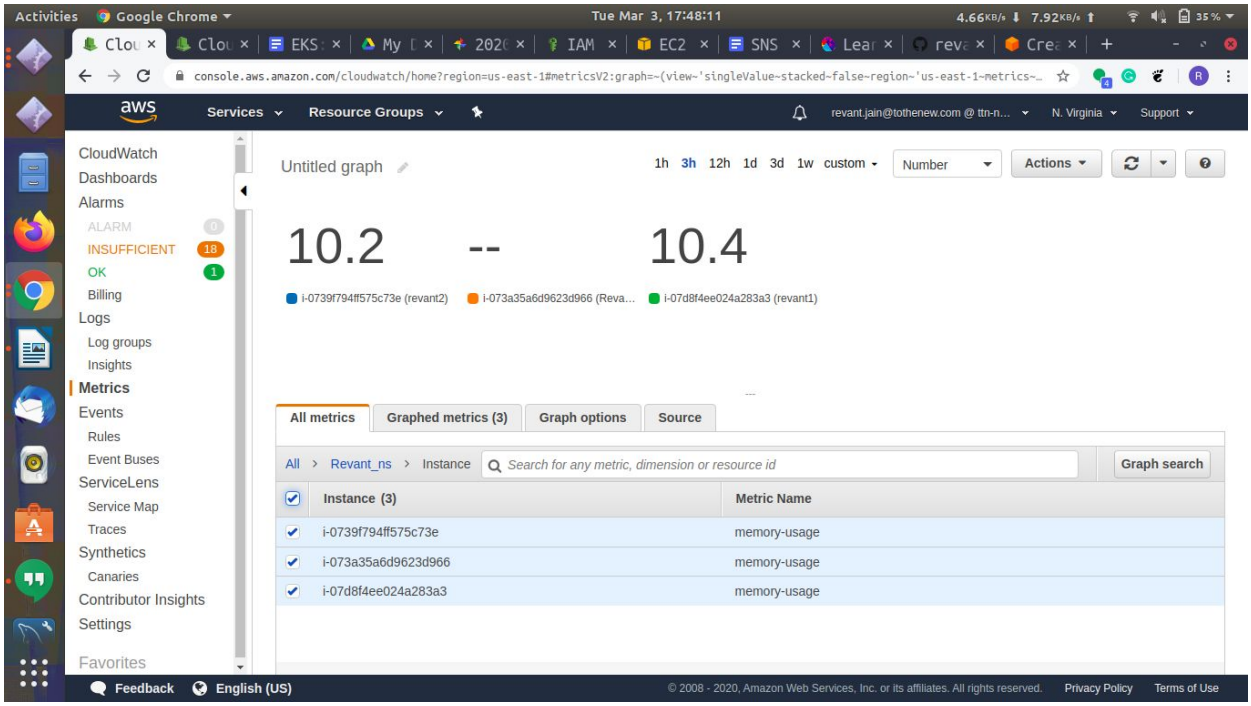


Now create launch template for this autoscaling group

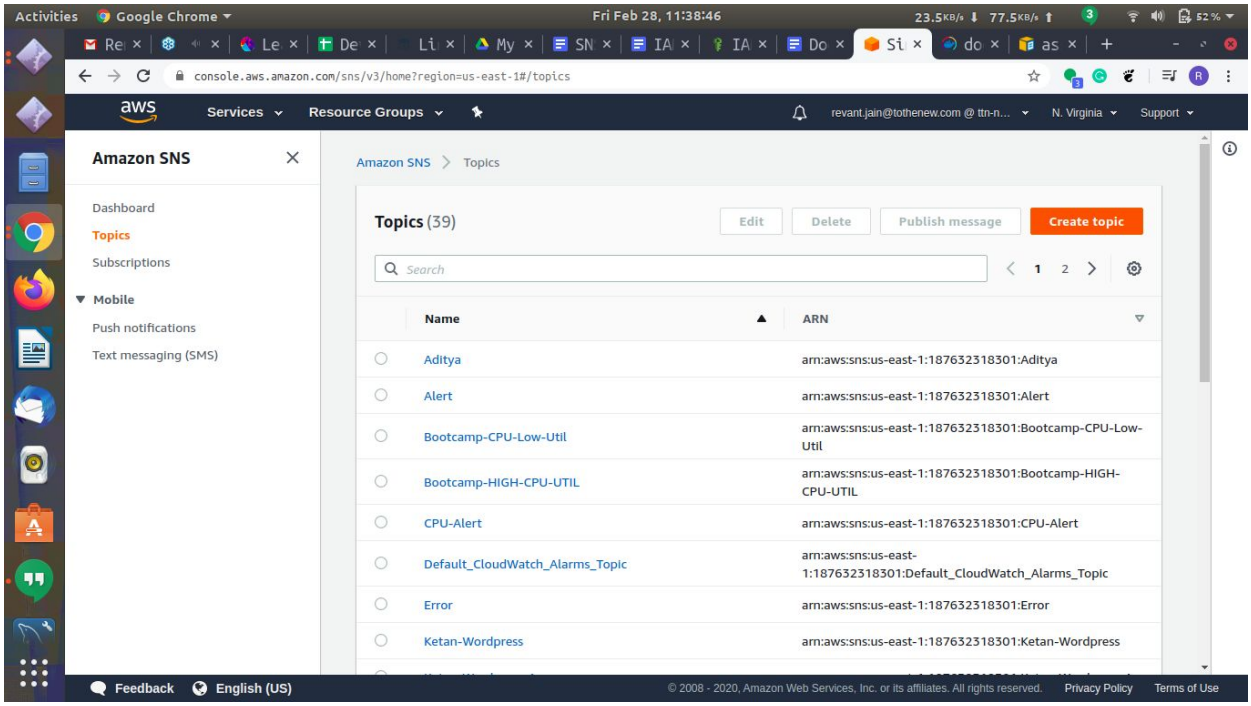

Activities
Google Chrome
Tue Mar 3, 16:09:30
console.aws.amazon.com/ec2/v2/home?region=us-east-1#CreateTemplate:
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
N. Virginia
Support
EC2 > Launch templates > Create launch template
Success
Successfully created revant (lt-0a341843365ed4a17)
Next steps
Launch an instance from this template
With On-Demand instances, you pay for compute capacity by the hour with no long-term commitments or upfront payments. Launch an On-Demand Instance from your launch template.
Launch instance from this template
Create an Auto Scaling group from your template

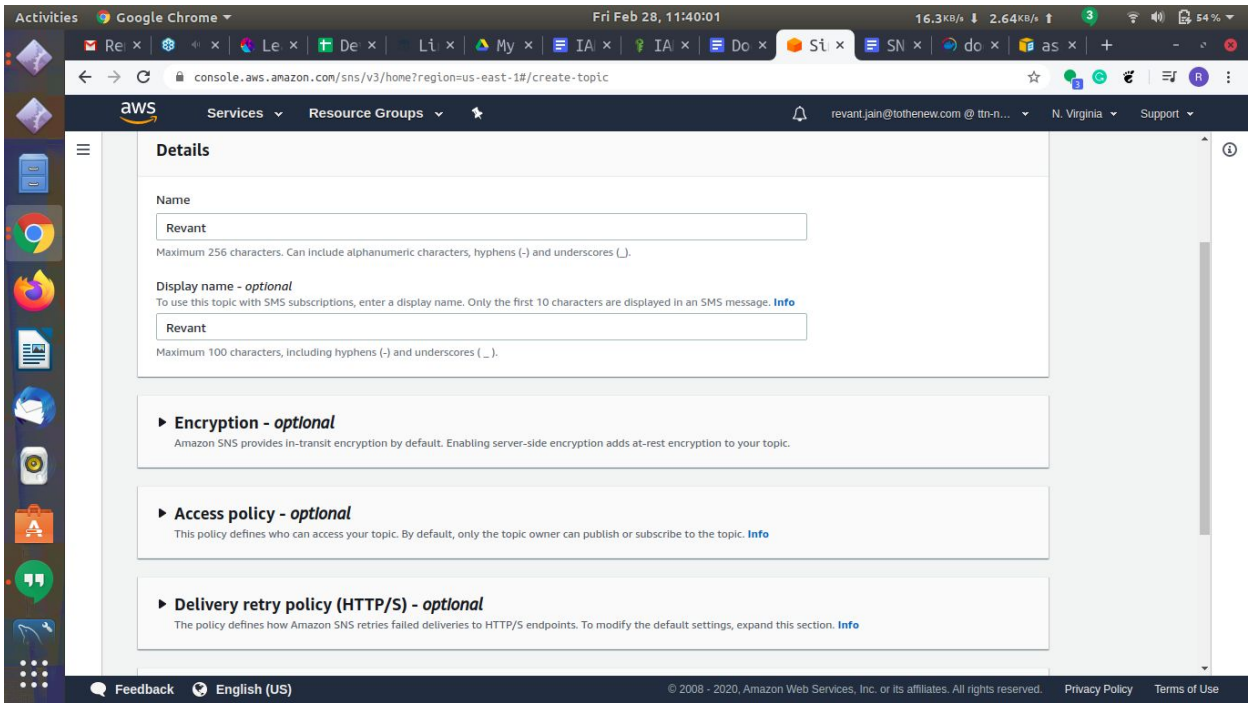

Activities
Google Chrome
Tue Mar 3, 16:10:55
console.aws.amazon.com/ec2/autoscaling/home?region=us-east-1#CreateAutoScalingGroup:source=launchtemplate;launchTemplateId=lt-0a3418...
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
N. Virginia
Support
1. Configure Auto Scaling group details
2. Configure scaling policies
3. Configure Notifications
4. Configure Tags
5. Review
Create Auto Scaling Group
Please review your Auto Scaling group details. You can go back to edit changes for each section. Click Create Auto Scaling group to complete the creation of an Auto Scaling group.
Auto Scaling Group Details
Edit details
Group name revant
Launch Template lt-0a341843365ed4a17
Launch Template Version 1
Launch Template Description version1
Group size 1
Minimum Group Size 1
Maximum Group Size 1
Subnet(s) subnet-06680a5b651f104dc
Health Check Grace Period 300
Detailed Monitoring No
Instance Protection None
Service-Linked Role AWSServiceRoleForAutoScaling
Scaling Policies
Edit scaling policies
Notifications
Edit notifications
Cancel
Previous
Create Auto Scaling group
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

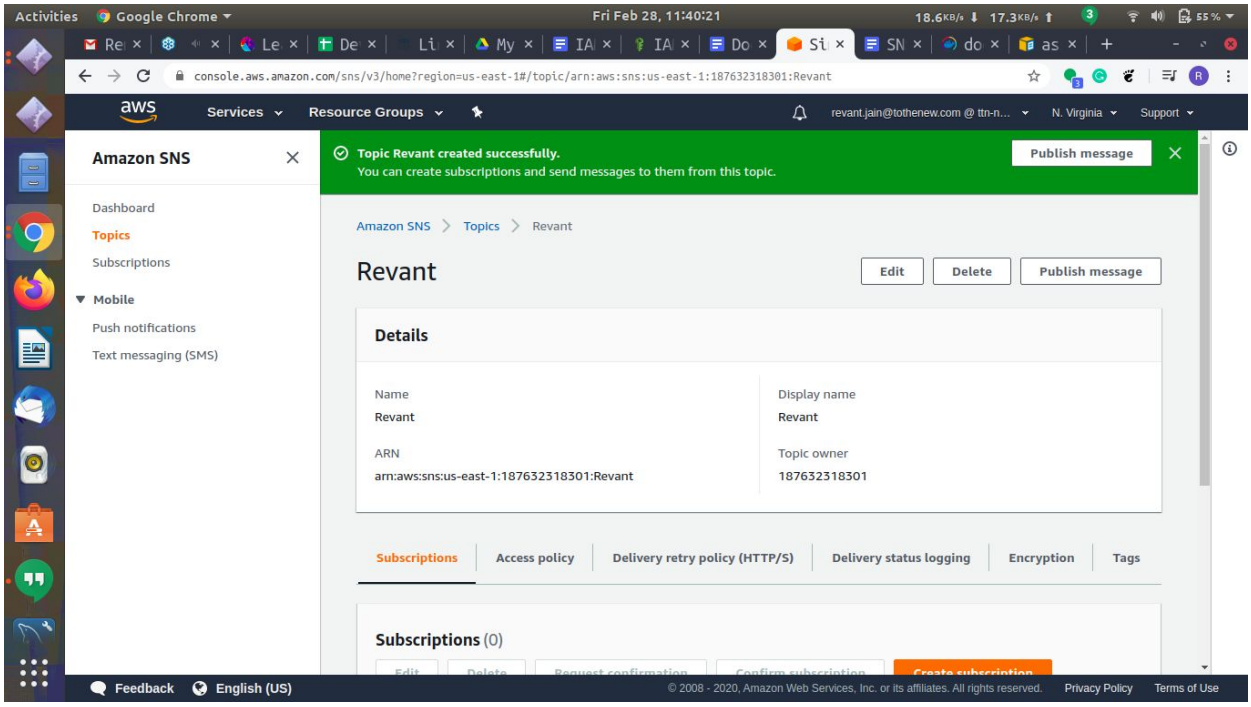

Activities
Google Chrome
Tue Mar 3, 16:15:16
console.aws.amazon.com/ec2/autoscaling/home?region=us-east-1#AutoScalingGroups:id=revant;view=details
Services
Resource Groups
N. Virginia
Support
EC2 Dashboard
Events
Tags
Reports
Limits
INSTANCES
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations
IMAGES
AMIs
Bundle Tasks
ELASTIC BLOCK STORE
Volumes
Snapshots
Try the new design for Amazon EC2 Auto Scaling
This older console is being replaced with the new EC2 Auto Scaling console. No new features or improvements will be made in this older console. Go to the new console.
Create Auto Scaling group
Actions
Filter: Filter Auto Scaling groups...
1 to 2 of 2 Auto Scaling Groups
Name
Launch Configuration
Instances
Desired
Min
Max
Availability Zones
Default Cooldown
Health Ch
revant
revant
1
2
1
2
us-east-1c
300
300
autoscaling-m...
maithely-template
1
1
1
1
us-east-1c
300
300
Auto Scaling Group: revant
Details
Activity History
Scaling Policies
Instances
Monitoring
Notifications
Tags
Scheduled Actions
Lifecycle Hooks
Launch Template
revant
Launch Template Version
2
Launch Template Description
-
Instance Types
-
Availability Zone(s)
us-east-1c
Subnet(s)
subnet-06680a5b651
Classic Load Balancers
Target Groups
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

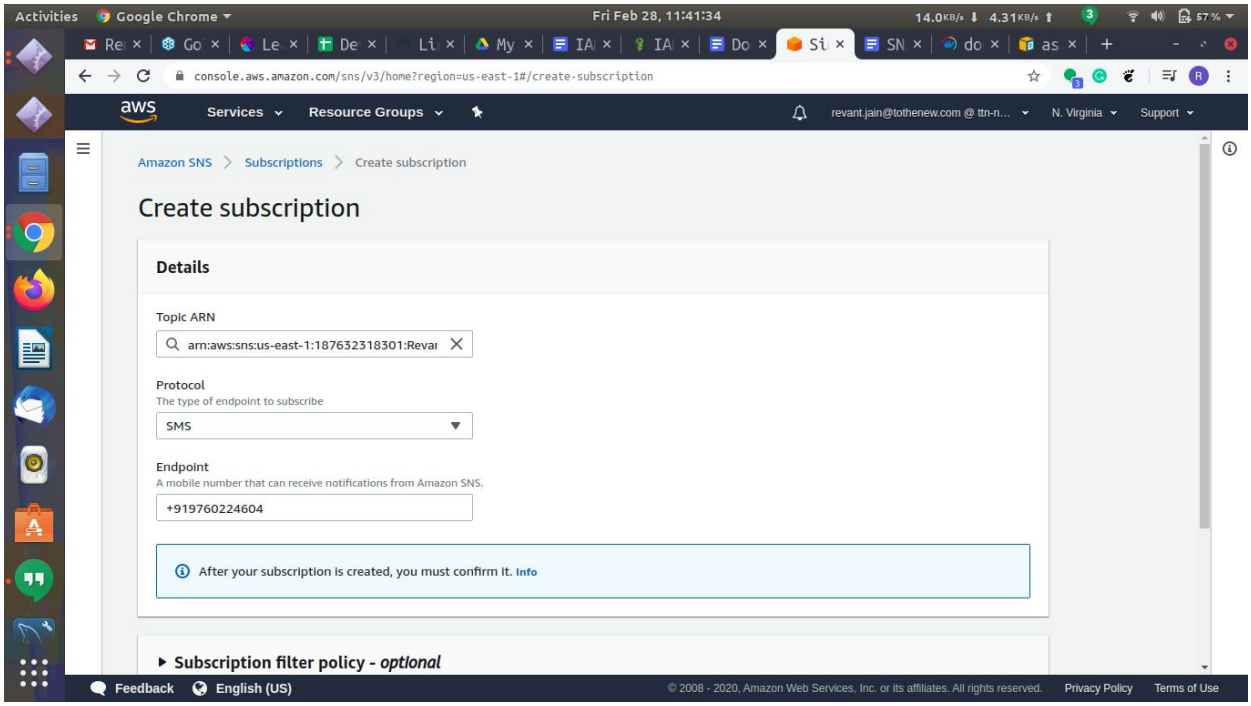

Activities
Google Chrome
Tue Mar 3, 17:48:11
console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2:graph=~(view~'singleValue~stacked~false~region~'us-east-1~metrics~...
Services
Resource Groups
N. Virginia
Support
CloudWatch
Dashboards
Alarms
ALARM
INSUFFICIENT
OK
Billing
Logs
Log groups
Insights
Metrics
Events
Rules
Event Buses
ServiceLens
Service Map
Traces
Synthetics
Canaries
Contributor Insights
Settings
Favorites
Untitled graph
1h 3h 12h 1d 3d 1w custom
Number
Actions
10.2
--
10.4
i-0739f794ff575c73e (revant2)
i-073a35a6d9623d966 (Reva...
i-07d8f4ee024a283a3 (revant1)
All metrics
Graphed metrics (3)
Graph options
Source
All
Revant_ns
Instance
Search for any metric, dimension or resource id
Graph search
Instance (3)
Metric Name
i-0739f794ff575c73e
memory-usage
i-073a35a6d9623d966
memory-usage
i-07d8f4ee024a283a3
memory-usage
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

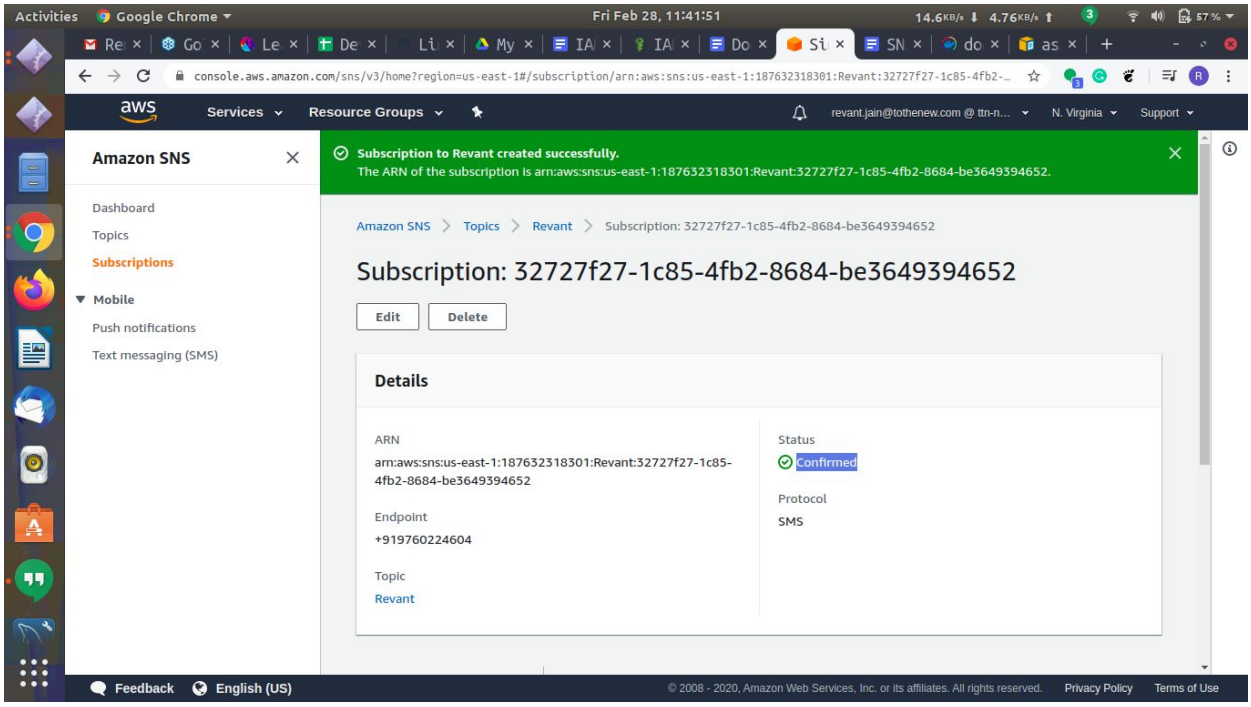
3. Create SNS topic, subscribe to a topic, publish message, unsubscribe the message and delete the topic

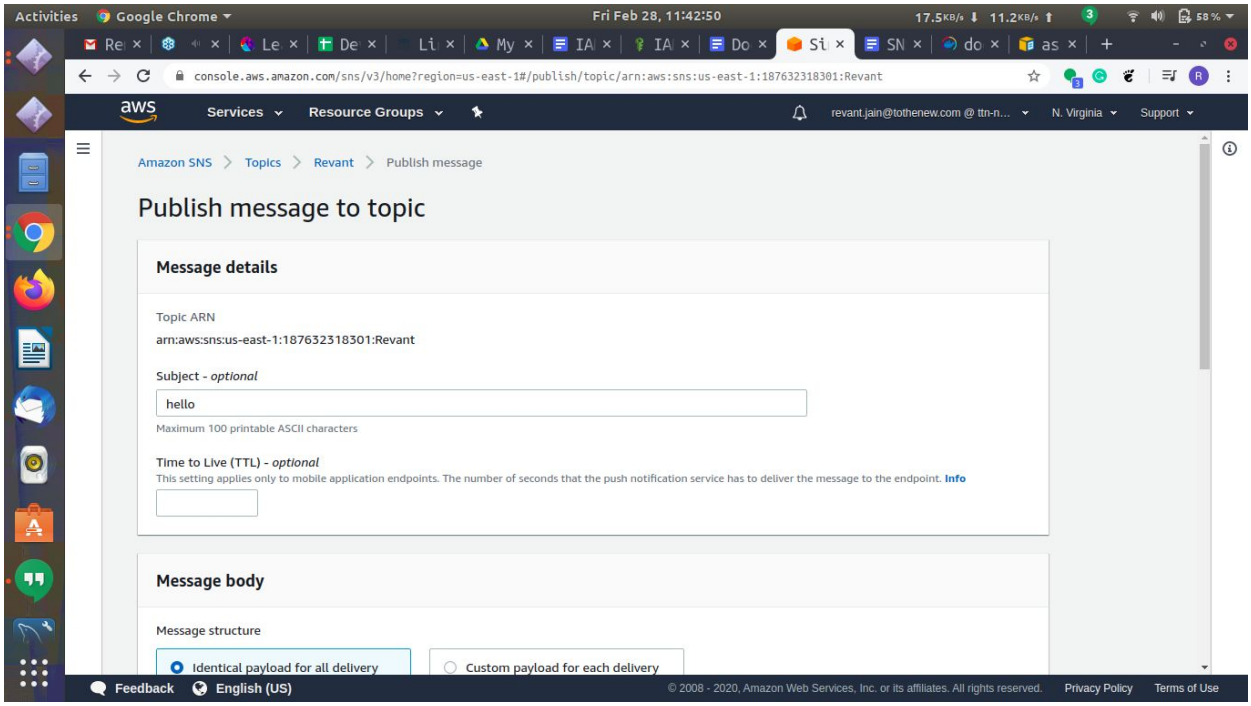




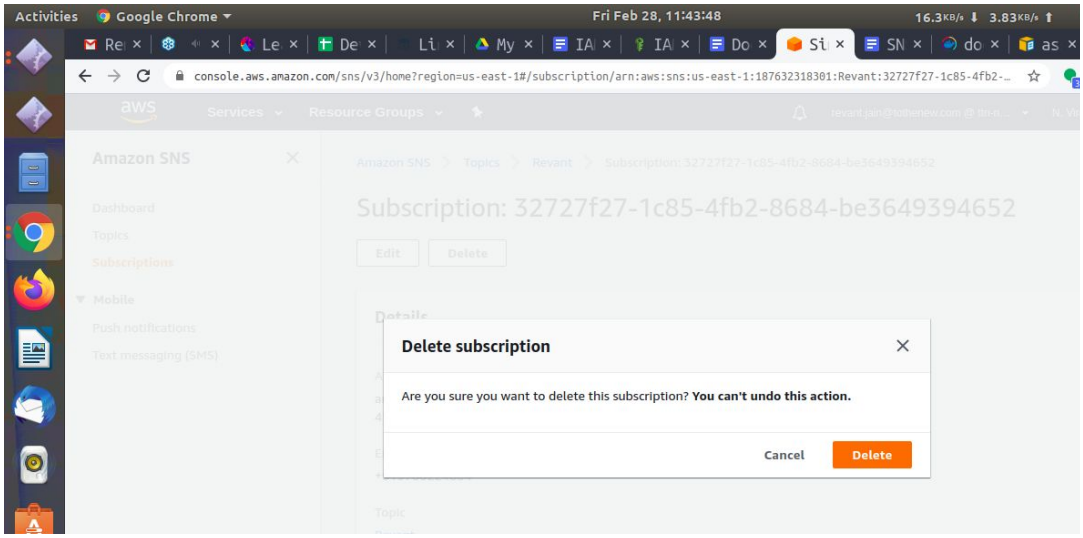

Activities
Google Chrome
Fri Feb 28, 11:40:21
console.aws.amazon.com/sns/v3/home?region=us-east-1#/topic/arn:aws:sns:us-east-1:187632318301:Revant
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
N. Virginia
Support
Amazon SNS
Dashboard
Topics
Subscriptions
Mobile
Push notifications
Text messaging (SMS)
Topic Revant created successfully.
You can create subscriptions and send messages to them from this topic.
Publish message
Amazon SNS > Topics > Revant
Revant
Edit
Delete
Publish message
Details
Name
Revant
Display name
Revant
ARN
arn:aws:sns:us-east-1:187632318301:Revant
Topic owner
187632318301
Subscriptions
Access policy
Delivery retry policy (HTTP/S)
Delivery status logging
Encryption
Tags
Subscriptions (0)
Create subscription
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use


Activities
Google Chrome
Fri Feb 28, 11:41:34
console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-subscription
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
N. Virginia
Support
Amazon SNS > Subscriptions > Create subscription
Create subscription
Details
Topic ARN
arn:aws:sns:us-east-1:187632318301:Revar
Protocol
The type of endpoint to subscribe
SMS
Endpoint
A mobile number that can receive notifications from Amazon SNS.
+919760224604
After your subscription is created, you must confirm it. Info
Subscription filter policy - optional
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

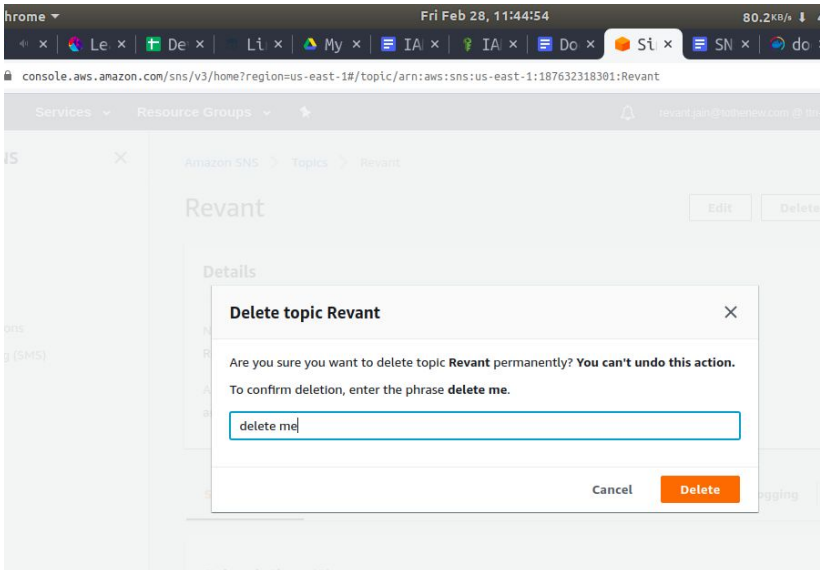

Activities
Google Chrome
Fri Feb 28, 11:41:51
console.aws.amazon.com/sns/v3/home?region=us-east-1#/subscription/arn:aws:sns:us-east-1:187632318301:Revant:32727f27-1c85-4fb2-...
aws
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
N. Virginia
Support
Amazon SNS
Dashboard
Topics
Subscriptions
Mobile
Push notifications
Text messaging (SMS)
Subscription to Revant created successfully.
The ARN of the subscription is arn:aws:sns:us-east-1:187632318301:Revant:32727f27-1c85-4fb2-8684-be3649394652.
Amazon SNS > Topics > Revant > Subscription: 32727f27-1c85-4fb2-8684-be3649394652
Subscription: 32727f27-1c85-4fb2-8684-be3649394652
Edit
Delete
Details
ARN
arn:aws:sns:us-east-1:187632318301:Revant:32727f27-1c85-4fb2-8684-be3649394652
Endpoint
+919760224604
Topic
Revant
Status
Confirmed
Protocol
SMS
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use


Activities
Google Chrome
Fri Feb 28, 11:42:50
console.aws.amazon.com/sns/v3/home?region=us-east-1#/publish/topic/arn:aws:sns:us-east-1:187632318301:Revant
aws
Services
Resource Groups
revant.jain@tothenew.com @ ttn-n...
N. Virginia
Support
Amazon SNS > Topics > Revant > Publish message
Publish message to topic
Message details
Topic ARN
arn:aws:sns:us-east-1:187632318301:Revant
Subject - optional
hello
Maximum 100 printable ASCII characters
Time to Live (TTL) - optional
This setting applies only to mobile application endpoints. The number of seconds that the push notification service has to deliver the message to the endpoint. Info
Message body
Message structure
Identical payload for all delivery
Custom payload for each delivery
Feedback
English (US)
© 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use

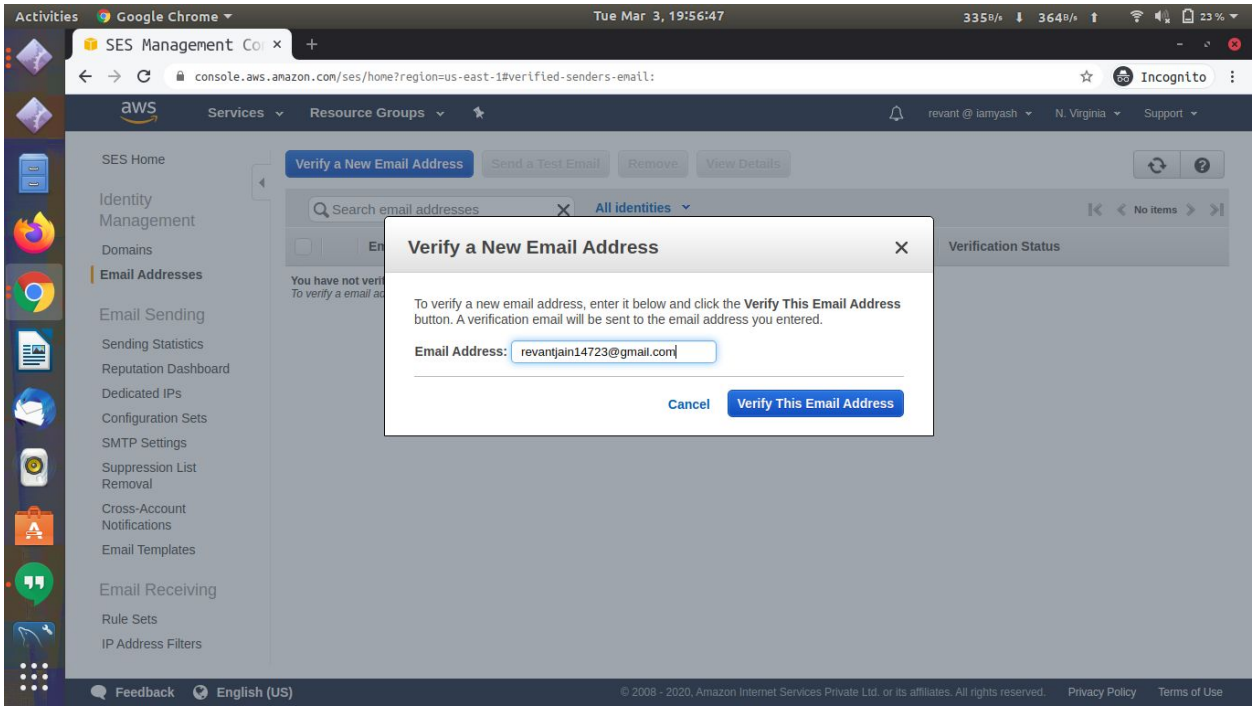
Unsubscribe the topic

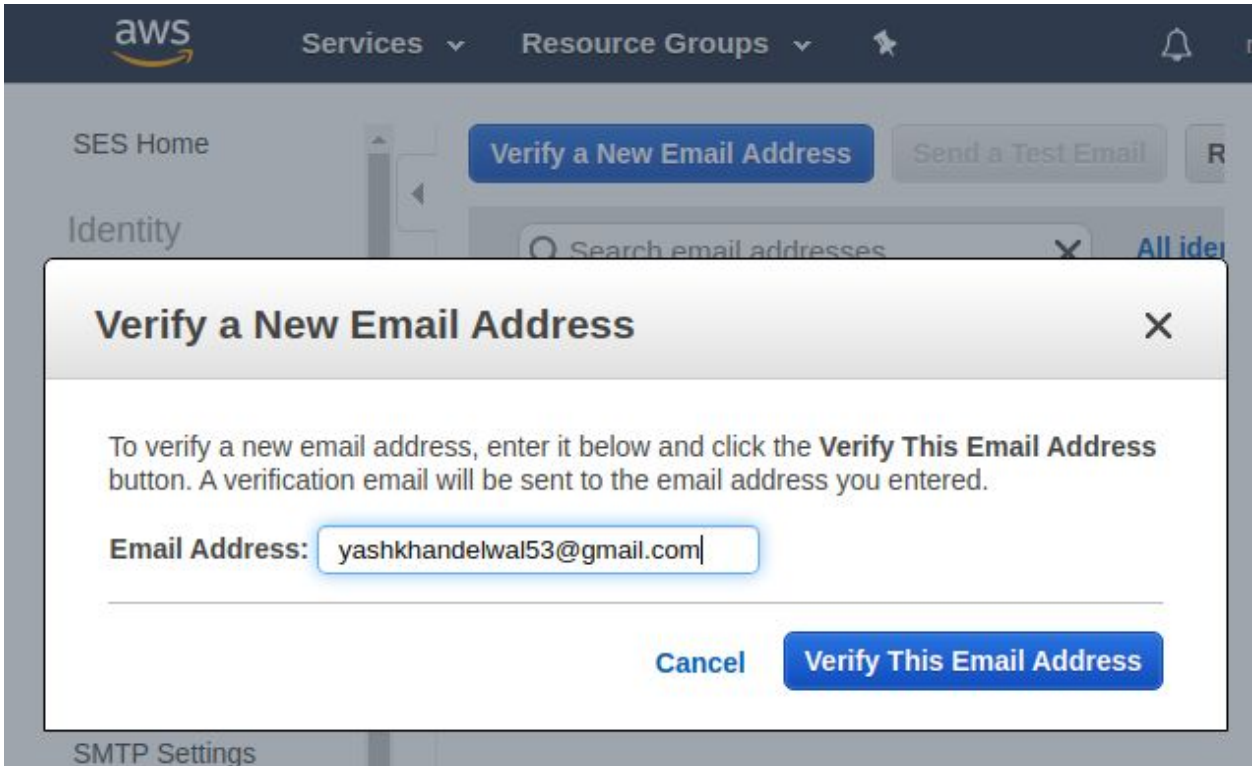


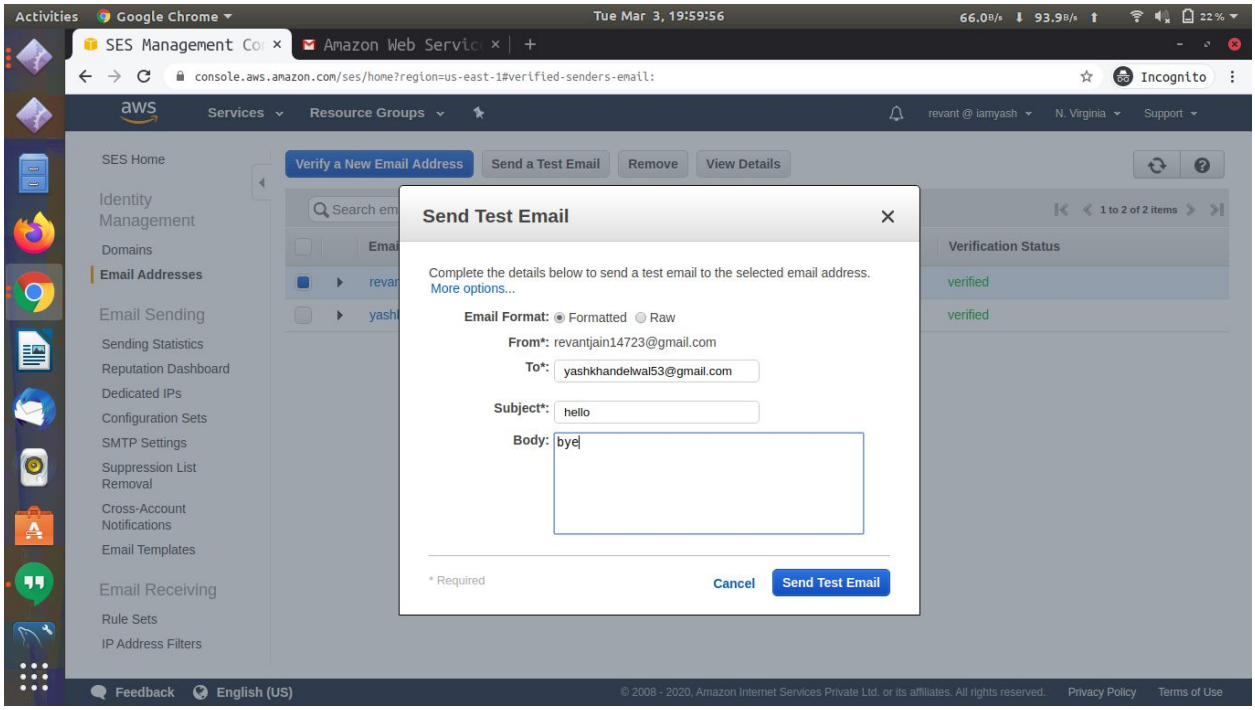
Delete the topic



4. Send a sample mail using SES.






Activities
Google Chrome
Tue Mar 3, 19:59:56
SES Management Co
Amazon Web Servic
console.aws.amazon.com/ses/home?region=us-east-1#verified-senders-email:
Incognito
aws
Services
Resource Groups
revant @ iamyash
N. Virginia
Support
SES Home
Identity Management
Domains
Email Addresses
Email Sending
Sending Statistics
Reputation Dashboard
Dedicated IPs
Configuration Sets
SMTP Settings
Suppression List Removal
Cross-Account Notifications
Email Templates
Email Receiving
Rule Sets
IP Address Filters
Verify a New Email Address
Send a Test Email
Remove
View Details
1 to 2 of 2 items
Verification Status
verified
verified
Send Test Email
Complete the details below to send a test email to the selected email address.
More options...
Email Format: Formatted Raw
From*: revantjain14723@gmail.com
To*: yashkhandelwal53@gmail.com
Subject*: hello
Body: bye
* Required
Cancel
Send Test Email
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use