

IAM Users

— + ↺ ↻ | 📄 Page view | 🔊 Read aloud | 📄 Add text | 🖋 Draw ▾ 🖋 Highlight

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users.

Tasks To Be Performed:

1. Create 4 IAM users named “Dev1”, “Dev2”, “Test1”, and “Test2”.
2. Create 2 groups named “Dev Team” and “Ops Team”.
3. Add Dev1 and Dev2 to the Dev Team.
4. Add Dev1, Test1 and Test2 to the Ops Team.

Specify user details

User details

User name

Dev1

The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ _ - (hyphen)

- ☒ Provide user access to the AWS Management Console - *optional*
If you're providing console access to a person, it's a [best practice](#) to manage their access in IAM Identity Center.



Are you providing console access to a person?

User type

- ☐ Specify a user in Identity Center - Recommended
We recommend that you use Identity Center to provide console access to a person. With Identity Center, you can centrally manage user access to their AWS accounts and cloud applications.
- ☒ I want to create an IAM user
We recommend that you create IAM users only if you need to enable programmatic access through access keys, service-specific credentials for AWS CodeCommit or Amazon Keyspaces, or a backup credential for emergency account access.

Console password

- ☐ Autogenerated password
You can view the password after you create the user.
- ☒ Custom password

Console password

- ☐ Autogenerated password
You can view the password after you create the user.

- ☒ Custom password
Enter a custom password for the user.

Siddh@rth945

- Must be at least 8 characters long
- Must include at least three of the following mix of character types: uppercase letters (A-Z), lowercase letters (a-z), numbers (0-9), and symbols ! @ # \$ % ^ & * () _ + - (hyphen) = [] { } | ' "

- ☒ Show password

- ☐ Users must create a new password at next sign-in - Recommended
Users automatically get the [IAMUserChangePassword](#) policy to allow them to change their own password.

- If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommit or Amazon Keyspaces, you can generate them after you create this IAM user. [Learn more](#)

Cancel

Next

Always check user must create new password for real life case scenario .

Set permissions

Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

Permissions options

- ☒ Add user to group
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.

- ☐ Copy permissions
Copy all group memberships, attached managed policies, and inline policies from an existing user.

- ☐ Attach policies directly
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

User groups (1)

Create group

Search

< 1 >

<input type="checkbox"/>	Group name	Users	Attached policies	Created
<input type="checkbox"/>	Developers	0	AWSCodeCommitFullAccess , A...	2023-10-13 (1 month ago)

► Set permissions boundary - optional

Cancel

Previous

Next

If you had any group or policy you can or move to next.

Review and create user.

Review your choices. After you create the user, you can view and download the autogenerated password, if enabled.

User details

User name
Dev1

Console password type
Custom password

Require password reset
No

Permissions summary

< 1 >

Name 



Type



Used as



No resources

Tags - optional

Tags are key-value pairs you can add to AWS resources to help identify, organize, or search for resources. Choose any tags you want to associate with this user.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags.

Cancel

Previous

Create user

Retrieve password

You can view and download the user's password below or email users instructions for signing in to the AWS Management Console. This is the only time you can view and download this password.

Console sign-in details

Email sign-in instructions 

Console sign-in URL

 <https://170303796048.signin.aws.amazon.com/console>

User name

 Dev2

Console password

 ***** [Show](#)

Cancel

Download .csv file

Return to users list

You can download .csv file which contain all details. Create the rest user in the same manner.

User created successfully

You can view and download the user's password and email instructions for signing in to the AWS Management Console.

View user

IAM > Users

Users (4) Info

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

Search

User name

Path

Groups

Last activity

MFA

Password age

Console last sign-in

<input type="checkbox"/>	Dev1	/	0	>	-	✔ 12 minutes	-
<input type="checkbox"/>	Dev2	/	0	>	-	-	-
<input type="checkbox"/>	Test1	/	0	>	-	-	-
<input type="checkbox"/>	Test2	/	0	>	-	-	-

IAM > User groups > Create user group

Create user group

Name the group

User group name

Enter a meaningful name to identify this group.

Dev Team

Maximum 128 characters. Use alphanumeric and '+=,.,@-_' characters.

Add users to the group - Optional (4) Info

An IAM user is an entity that you create in AWS to represent the person or application that uses it to interact with AWS.

Search

If we want to add user and policies , we can add now or we go directly to create group scroll down.

[IAM](#) > User groupsUser groups (2) [Info](#)

A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.

< 1 >



<input type="checkbox"/>	Group name ▲	Users ▼	Permissions ▼	Creation time ▼
<input type="checkbox"/>	Dev_Team	⚠ 0	⚠ Not defined	Now
<input type="checkbox"/>	Ops_Team	⚠ 0	⚠ Not defined	

[IAM](#) > [User groups](#) > Dev_TeamDev_Team [Info](#)[Delete](#)

Summary

[Edit](#)

User group name
Dev_Team

Creation time
November 23, 2023, 14:52 (UTC+05:30)

ARN
 arn:aws:iam::170303796048:group/Dev_Team

[Users](#)[Permissions](#)[Access Advisor](#)

Users in this group (0)

An IAM user is an entity that you create in AWS to represent the person or application that uses it to interact with AWS.

< 1 >



<input type="checkbox"/>	User name	Groups ▲	Last activity ▼	Creation time ▼
--------------------------	-----------	----------	-----------------	-----------------

No resources to display

Add users to Dev_Team [Info](#)

Other users in this account (2/4)

<input type="checkbox"/>	User name ↗	Groups	Last activity	Creation time
<input checked="" type="checkbox"/>	Dev1	0	None	24 minutes ago
<input checked="" type="checkbox"/>	Dev2	0	None	17 minutes ago
<input type="checkbox"/>	Test1	0	None	13 minutes ago
<input type="checkbox"/>	Test2	0	None	12 minutes ago

Cancel

Add users

✔ 3 users added to this group.

User groups (2) [Info](#)

A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.

<input type="checkbox"/>	Group name	Users	Permissions	Creation time
<input type="checkbox"/>	Dev_Team	2	⚠ Not defined	5 minutes ago
<input type="checkbox"/>	Ops_Team	3	⚠ Not defined	4 minutes ago

We can add the same user as many group as we want.

IAM Policies

— + ↻ ↺ | 📄 Page view | 🔊 Read aloud | 📝 Add text | 🖋 Draw ▾ 🖌 Highlight ▾

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users.

Tasks To Be Performed:

1. Create policy number 1 which lets the users to:
 - a. Access S3 completely
 - b. Only create EC2 instances
 - c. Full access to RDS
2. Create a policy number 2 which allows the users to:
 - a. Access CloudWatch and billing completely
 - b. Can only list EC2 and S3 resources
3. Attach policy number 1 to the Dev Team from task 1
4. Attach policy number 2 to Ops Team from task 1

Policies-
create
policies-
choose
permissions
-all s3 and
RDS actions
and
resources .

IAM > Policies > Create policy

Step 1

Specify permissions

Step 2

Review and create

Specify permissions

Info

Add permissions by selecting services, actions, resources, and conditions. Build permission statements using the JSON editor.

Policy editor

VisualJSONActions

S3

AllowAll actions

Specify what actions can be performed on specific resources in S3.

Actions allowed

Specify actions from the service to be allowed.

Filter Actions

Manual actions | Add actions

☒ All S3 actions (s3:*)

Access level

Expand all | Collapse all

List (Selected 12/12)

Read (Selected 54/54)

Write (Selected 45/45)

Permissions management (Selected 15/15)

Tagging (Selected 12/12)

Required permissions not selected.

To grant permissions for the selected resource actions, you must include additional required actions

s3:CreateJob requires 1 more action.

s3:PutReplicationConfiguration requires 1 more action.

Resources

Specify resource ARNs for these actions.

All

Specific

The all wildcard "*" may be overly permissive for the selected actions. Allowing specific ARNs for these service resources can improve security.

Request conditions - optional

Actions on resources are allowed or denied only when these conditions are met.

Select a service

Specify what actions can be performed on specific resources in a service.

Service

Choose a service

+ Add more permissions

Security: 0Errors: 0Warnings: 0Suggestions: 0

Cancel

Next

▼ Actions allowed

Specify actions from the service to be allowed.

Q instance



Effect

☒ Allow ☐ Deny

List

☐ DescribeClassicLinkInstances | [Info](#)

☐ DescribeFleetInstances | [Info](#)

☐ DescribeIamInstanceProfileAssociations | [Info](#)

☐ DescribeInstanceAttribute | [Info](#)

☐ DescribeInstanceConnectEndpoints | [Info](#)

☐ DescribeInstanceCreditSpecifications | [Info](#)

☐ DescribeInstanceEventNotificationAttributes | [Info](#)

☐ DescribeInstanceEventWindows | [Info](#)

☐ DescribeInstances | [Info](#)

☐ DescribeInstanceStatus | [Info](#)

☐ DescribeInstanceTopology | [Info](#)

☐ DescribeInstanceTypeOfferings | [Info](#)

☒ DescribeInstanceTypes | [Info](#)

☐ DescribeReservedInstances | [Info](#)

☐ DescribeReservedInstancesListings | [Info](#)

☐ DescribeReservedInstancesModifications | [Info](#)

☐ DescribeReservedInstancesOfferings | [Info](#)

☐ DescribeScheduledInstanceAvailability | [Info](#)

☐ DescribeScheduledInstances | [Info](#)

☐ DescribeSpotFleetInstances | [Info](#)

☐ DescribeSpotInstanceRequests | [Info](#)

☐ DescribeVerifiedAccessInstanceLoggingConfigurations | [Info](#)

☐ DescribeVerifiedAccessInstances | [Info](#)

☐ DescribeVerifiedAccessInstanceWebAclAssociations | [Info](#)

☐ GetInstanceTypesFromInstanceRequirements | [Info](#)

☐ GetVerifiedAccessInstanceWebAcl | [Info](#)

Search for services required to create an ec2 instance and choose.

Q Keypair



List

☒ DescribeKeyPairs | [Info](#)

Write

☒ CreateKeyPair | [Info](#)

☐ DeleteKeyPair | [Info](#)

☐ ImportKeyPair | [Info](#)

For vpc – describe vpcs

For subnet- describe subnets

For tag – describe and create

For security group – describe security rules and security group.

For volumes – create, attach and describe volumes.

For networkinterface- create , attach and describe

For instances- describe and describe instance type, run instance.

Allow all resources and next .

Policy details

Policy name

Enter a meaningful name to identify this policy.

Policy_Number_1

Maximum 128 characters. Use alphanumeric and '+=,.,@-_' characters.

Description - optional

Add a short explanation for this policy.

Maximum 1,000 characters. Use alphanumeric and '+=,.,@-_' characters.

Permissions defined in this policy [Info](#)

Edit

Permissions defined in this policy document specify which actions are allowed or denied. To define permissions for an IAM identity (user, user group, or role), attach a policy to it

Q

Search

Allow (3 of 386 services)

☐ Show remaining 383 services

Service ▲	Access level ▼	Resource	Request condition
EC2	Limited: List, Tagging, Write	All resources	None
RDS	Full access	All resources	None
S3	Full access	All resources	None

Add tags - optional [Info](#)

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags.

Cancel

Previous

Create policy

Choose billing and cloudwatch services allow all actions and resources.

▼ Actions allowed

Specify actions from the service to be allowed.

Manual actions | [Add actions](#)

☐ All EC2 actions (ec2:*)

Access level

► List (Selected 172/172)

► Read (35)

► Write (417)

► Permissions management (5)

► Tagging (2)

Effect

☒ Allow ☐ Deny

[Expand all](#) | [Collapse all](#)

▼ Resources

Specify resource ARNs for these actions.

☒ All

☐ Specific

⚠ The all wildcard '*' may be overly permissive for the selected actions. Allowing specific ARNs for these service resources can improve security.

Manual actions | [Add actions](#)

☐ All S3 actions (s3:*)

Access level

▼ List (Selected 12/12)

☒ All list actions

☒ ListAccessPoints [Info](#)

☒ ListBucket [Info](#)

☒ ListJobs [Info](#)

☒ ListStorageLensConfigurations [Info](#)

☒ ListAccessPointsForObjectLambda [Info](#)

☒ ListBucketMultipartUploads [Info](#)

☒ ListMultipartUploadParts [Info](#)

☒ ListStorageLensGroups [Info](#)

☒ ListAllMyBuckets [Info](#)

☒ ListBucketVersions [Info](#)

☒ ListMultiRegionAccessPoints [Info](#)

☒ ListTagsForResource [Info](#)

Choose another service s3 and ec2 allow all list actions and all resources.

Policies (1147) [Info](#)

A policy is an object in AWS that defines permissions.

↻

Actions ▼

Delete

Create policy

🔍 Search

Filter by Type

Customer managed ▼

2 matches

< 1 >

⚙️

	Policy name ▲	Type ▼	Used as ▼	Description
<input type="radio"/>	<div>+</div> Policy_Number_1	Customer managed	None	-
<input type="radio"/>	<div>+</div> Policy_Number_2	Customer managed	None	-

Dev_Team [Info](#)

Delete

Summary

Edit

User group name Dev_Team	Creation time November 23, 2023, 14:52 (UTC+05:30)	ARN arn:aws:iam::170303796048:group/Dev_Team
-----------------------------	---	---

Permissions policies (0) [Info](#)

You can attach up to 10 managed policies.

↻

Simulate

Remove

Add permissions ▲

Attach policies

Create inline policy

🔍 Search

Filter by Type

All types ▼

< 1 >

⚙️



<input type="checkbox"/>	Policy name	Type ▼	Attached entities ▼
No resources to display			

Attach permission policies to Dev_Team

► Current permissions policies (0)

Other permission policies (891)

You can attach up to 10 managed policies to this user group. All of the users in this group inherit the attached permissions.

Filter by Type		2 matches		< 1 > ⚙	
<input type="text" value="Search"/>		Customer managed			
<input type="checkbox"/>	Policy name	Type	Used as	Description	
<input type="checkbox"/>	 Policy_Number_1	Customer managed	None	-	
<input type="checkbox"/>	 Policy_Number_2	Customer managed	None	-	

[Cancel](#)[Attach policies](#)

✓ Policies attached to this user group.

User groups (2) [Info](#)

A user group is a collection of IAM users. Use groups to specify permissions for a collection of users.

Search

<

1

>

<input type="checkbox"/>	Group name	Users	Permissions	Creation time
<input type="checkbox"/>	Dev_Team	2	✔ Defined	1 hour ago
<input type="checkbox"/>	Ops_Team	3	✔ Defined	1 hour ago

Attach the policy number 2 in the same way to ops team.

Go to login as a IAM user using different browser copy and paste your real account 12 digit number – username-password.

Resources

EC2 Global view

You are using the following Amazon EC2 resources in the Europe (Stockholm) Region:

Instances (running) 0	Auto Scaling Groups API Error	Dedicated Hosts API Error
Elastic IPs API Error	Instances 0	Key pairs 2
Load balancers API Error	Placement groups API Error	Security groups 19
Snapshots API Error	Volumes 0	

Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance

Migrate a server

Note: Your instances will launch in the Europe (Stockholm) Region

Service health

AWS Health Dashboard

Region
Europe (Stockholm)

Zones

Stockholm

Dev1 @ 1703-0379-6048

Account ID: 1703-0379-6048

IAM user: Dev1

Account

Organization

Service Quotas

Billing Dashboard

Security credentials

Switch role

Sign out

You don't have permissions to access AWS Health.

Instances (1) Info

Find Instance by attribute or tag (case-sensitive)

Connect

Instance state

Actions

Launch instances

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>	IAM	i-03e82bb017be2e09f	Running	t3.micro		No alarms	eu-north-1a	ec2-16-16-65-24

Since we gave permissions full access of S3 service so we can upload any file we want to and do all the task.

[Amazon S3](#) > [Buckets](#) > cf-templates-126txhh3ur0p8-us-east-1

cf-templates-126txhh3ur0p8-us-east-1 [Info](#)

Objects

Properties

Permissions

Metrics

Management

Access Points

Objects (3)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder

Upload

< 1 >

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	2023-10-31T154222.392Z7qp-0-just-ec2.yaml	yaml	October 31, 2023, 21:12:46 (UTC+05:30)	166.0 B	Standard
<input type="checkbox"/>	2023-10-31T160530.756Z2c4-1-ec2-with-sg-eip.yaml	yaml	October 31, 2023, 21:35:54 (UTC+05:30)	1.1 KB	Standard
<input type="checkbox"/>	wallpaperflare.com_wallpaper(5).jpg	jpg	November 24, 2023, 14:50:26 (UTC+05:30)	168.8 KB	Standard

IAM Roles

Problem Statement:

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users.

Tasks To Be Performed:

1. Create a role which only lets user1 and user2 from task 1 to have complete access to VPCs and DynamoDB.
2. Login into user1 and shift to the role to test out the feature.

Not AWS account because we need to give id and password of our account.

[IAM](#) > [Roles](#) > Create role

Step 1

Select trusted entity

Step 2

Add permissions

Step 3

Name, review, and create

Select trusted entity [Info](#)

Trusted entity type



AWS service

Allow AWS services like EC2, Lambda, or others to perform actions in this account.



AWS account

Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.



Web identity

Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.



SAML 2.0 federation

Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.



Custom trust policy

Create a custom trust policy to enable others to perform actions in this account.

Give the ARN id of those users you want to add in this roles.

```
1  {
2    "Version": "2012-10-17",
3    "Statement": [
4      {
5        "Sid": "Statement1",
6        "Effect": "Allow",
7        "Principal": {
8          "AWS": ["arn:aws:iam::170303796048:user/Dev1",
9                "arn:aws:iam::170303796048:user/Dev2"]
10       },
11        "Action": "sts:AssumeRole"
12      }
13    ]
14  }
```

Edit

Se

Add permissions

Permissions policies (2/891)

Info

Choose one or more policies to attach to your new role.



Search

Filter by Type

All types

< 1 2 3 4 5 6 7 ... 45 >

⚙

<div><div>[-]</div></div>	Policy name <div>🔗</div>	Type <div>▲</div>	Description <div>▼</div>
<input type="checkbox"/>	<div><div>+</div><div> AdministratorAccess</div></div>	AWS managed - job function	Provides full access to AWS services an...
<input type="checkbox"/>	<div><div>+</div><div> AdministratorAccess-Amplify</div></div>	AWS managed	Grants account administrative permiss...

Name, review, and create

Role details

Role name

Enter a meaningful name to identify this role.

DEV1-DEV2-ROLES

Maximum 64 characters. Use alphanumeric and '+=,.,@-_' characters.

Description

Add a short explanation for this role.

Name the role and create role. Roles are temporary access and policies are permanent access . Roles also help to attach further policies after creating the user.

DynamoDB

Dashboard

Tables

Update settings

Explore items

PartiQL editor

Backups

Exports to S3

Imports from S3

Reserved capacity

Settings

Share your feedback on Amazon DynamoDB

Your feedback is an important part of helping us provide a better customer experience. Take this short survey to let us know how we're doing.

Your role does not have permissions to view the list of tables.

DynamoDB > Tables

Tables (0) Info

Find tables by table name

Any tag key

Any tag value

< 1 >

⚙

Na... ▲

Status

Partition key

Sort key

Indexes

Deletion protection

Read capacity mode

Write capacity mo...

Total s

An error occurred while loading the table list.

User: arn:aws:iam::170303796048:user/Dev1 is not authorized to perform: dynamodb:ListTables on resource: arn:aws:dynamodb:eu-north-1:170303796048:table/* because no identity-based policy allows the dynamodb:ListTables action

Retry

Stockholm ▼

Dev1 @ 1703-0379-6048 ▲

Account ID: 1703-0379-6048

IAM user: Dev1

Account

Organization

Service Quotas

Billing Dashboard

Security credentials

→

Switch role

Sign out

Switch Role

Allows management of resources across Amazon Web Services accounts using a single user ID and password. You can switch roles after an Amazon Web Services administrator has configured a role and given you the account and role details. [Learn more.](#)

Account*

170303796048

ⓘ

Role*

DEV1-DEV2-ROLES

ⓘ

Display Name

DEV1-DEV2-ROLES @ 17

ⓘ

Color

a a a a a a

*Required

Cancel

Switch Role

English ▼

Terms of Use Privacy Policy

© 1996-2023, Amazon Web Services, Inc. or its affiliates.

As we switch to the roles we have full access of DynamoDB .

DynamoDB

×

Dashboard

Tables

Update settings

Explore items

PartiQL editor

Backups

Exports to S3

Imports from S3

Reserved capacity

Settings

Share your feedback on Amazon DynamoDB

Your feedback is an important part of helping us provide a better customer experience. Take this short survey to let us know how we're doing.

Share feedback

×

DynamoDB > Tables

Tables (0) Info

Refresh

Actions ▼

Delete

Create table

Find tables by table name

Any tag key ▼

Any tag value ▼

< 1 >

⚙️

	Na... ▲	Status	Partition key	Sort key	Indexes	Deletion protection	Read capacity mode	Write capacity mo...	Total si...
You have no tables in this account in this AWS Region.									
Create table									

Currently active as: DEV1-DEV2-ROLES ⓘ
Account ID: 1703-0379-6048 ⓘ

Account

Organization

Service Quotas

Billing Dashboard

Signed in as: Dev1 ⓘ
Account ID: 1703-0379-6048 ⓘ

Switch back

Role history

DEV1-DEV2-ROLES @ 170303796048

Switch role

Sign out

CloudWatch Dashboard

— + ↺ ↔ | 📄 Page view | 🔊 Read aloud | 📝 Add text | 🎨 Draw ▾ 🖌 Highlight ▾

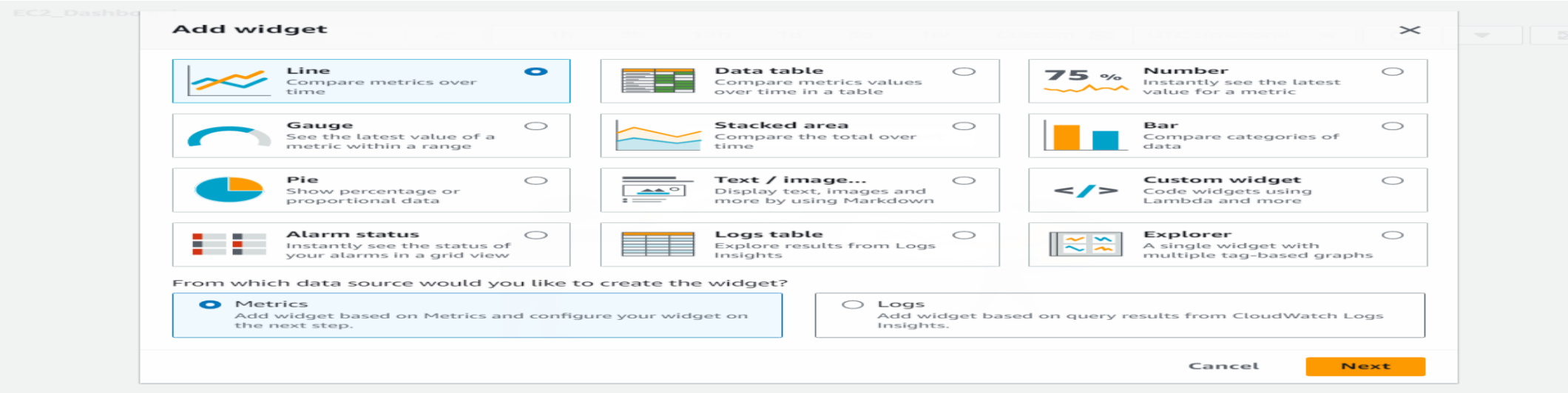
Problem Statement:

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users. Also, you will be monitoring the machines created by these users for any errors or misconfigurations.

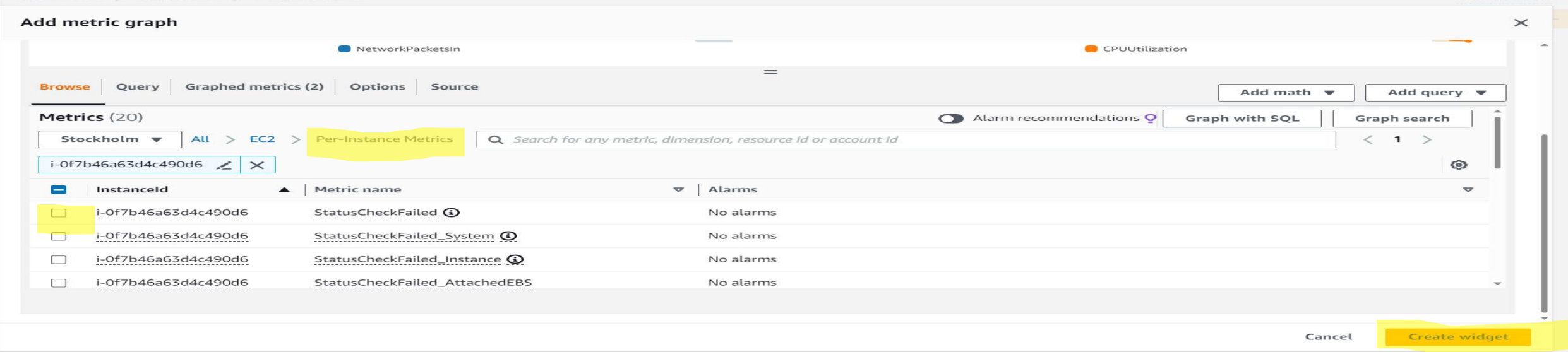
Tasks To Be Performed:

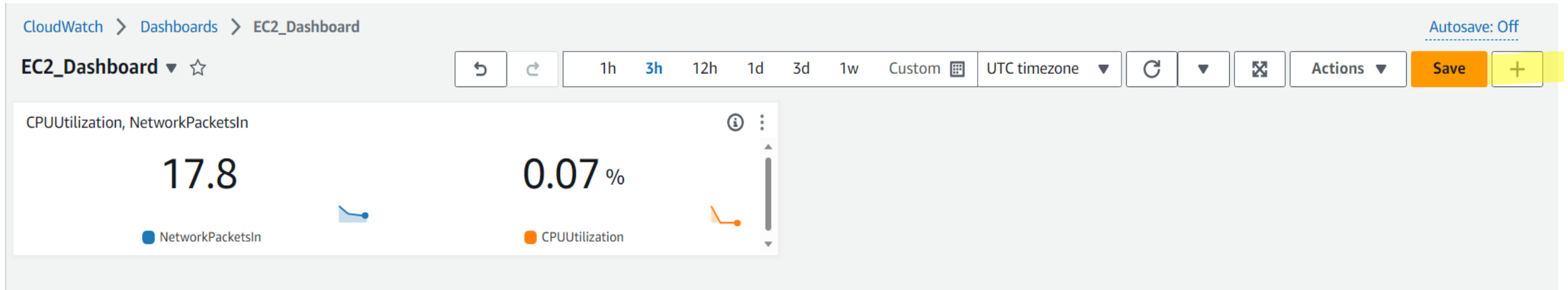
1. Create a dashboard which lets you check the CPU utilization and networking for a particular EC2 instance.

Cloudwatch – dashboard – create dashboard – name – choose which style you want and next



Go for pre instance metrics – enter instance id – enter – now all details visible – select requires one and create widget. Choose network packets in and CPU utilization.





If we want to add another widget hit the plus icon do the same following steps , I choose guage give upper and lower limit – create widget.

Add metric graph

Browse Query Graphed metrics (1) Options Source

Legend position

☐ Hidden ☒ Bottom

Gauge range

Min 0 Max 100

Horizontal annotations / thresholds

Add threshold

Value

☒ Latest value shows the value from the most recent period of your chosen time range.

☐ Time range value shows the value from the entire time range.

Live data

☐ Display most recent data point, even when not yet fully aggregated.

Number widget format

☐ Show as many digits as can fit, before rounding

Add math Add query

Cancel Create widget

EC2_Dashboard ☆

1h 3h 12h 1d 3d 1w Custom UTC timezone

CPUUtilization, NetworkPacketsIn

17.8

0.07 %

NetworkPacketsIn CPUUtilization

CPUUtilization

0.08 %

0 100

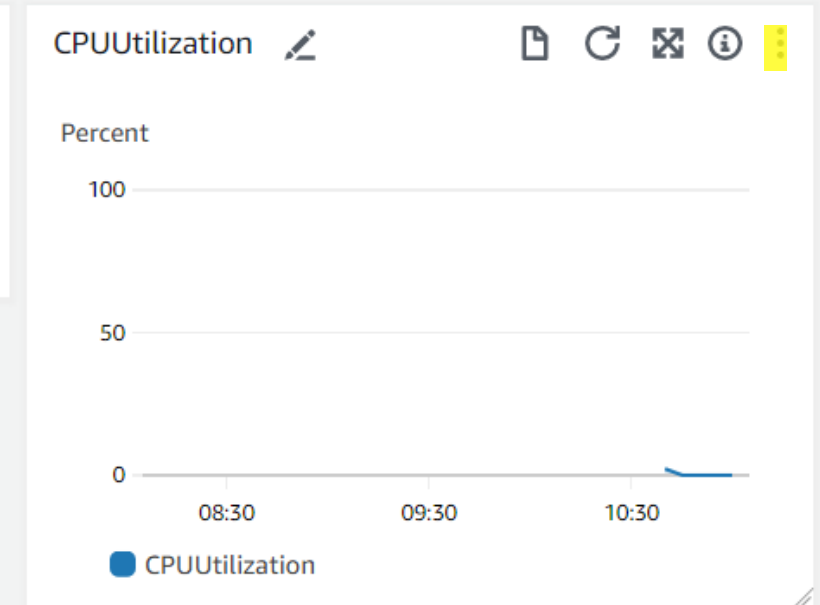
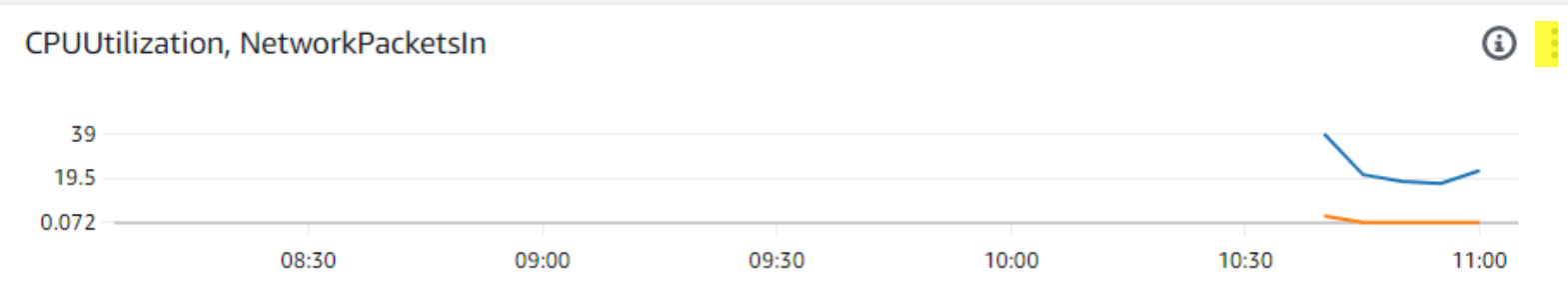
CPUUtilization

If we want to change the graph style – click on three dots- widget type and choose.

CloudWatch > Dashboards > EC2_Dashboard

EC2_Dashboard ▼ ☆

↶ ↷ 1h 3h 12h 1d 3d 1w Custom UTC timezone ↻ ▼



CloudWatch Alarms

— + ↺ ↻ | 📄 Page view | 🗣️ Read aloud | 📝 Add text | 🖋️ Draw ▾ 🖌️ Highlight ▾ ↩️

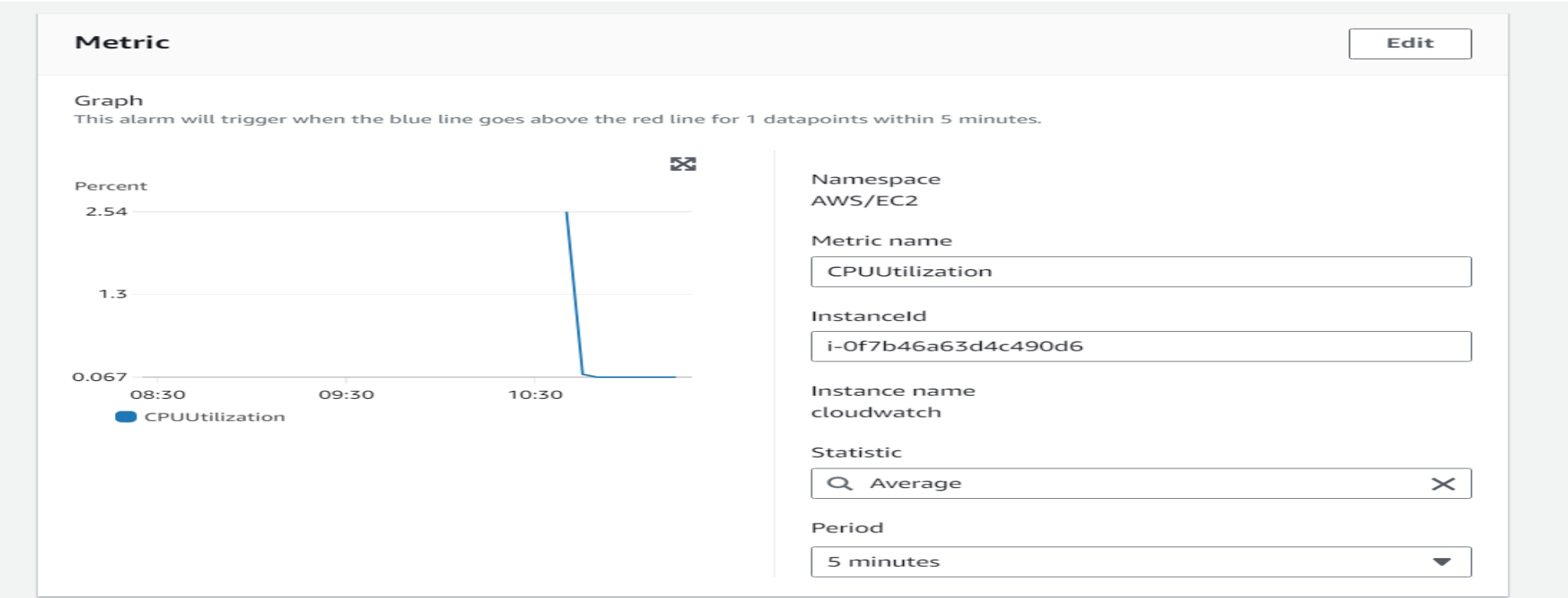
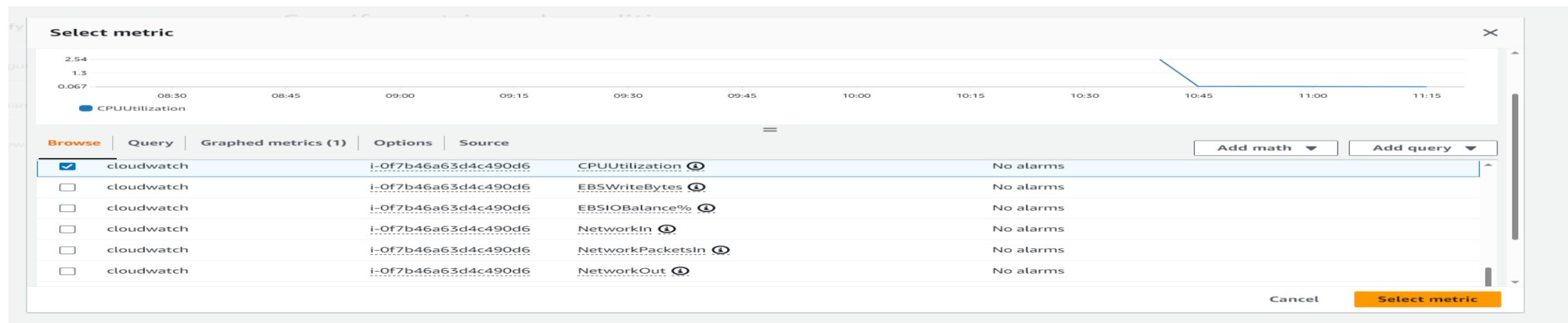
Problem Statement:

You work for XYZ Corporation. To maintain the security of the AWS account and the resources you have been asked to implement a solution that can help easily recognize and monitor the different users. Also, you will be monitoring the machines created by these users for any errors or misconfigurations.

Tasks To Be Performed:

1. Create a CloudWatch billing alarm which goes off when the estimated charges go above \$500.
2. Create a CloudWatch alarm which goes off to an Alarm state when the CPU utilization of an EC2 instance goes above 65%. Also add an SNS topic so that it notifies the person when the threshold is crossed.

Go to all alarms – create new alarm – select metrics – do the same steps as creating the dashboard until here.



Conditions

Threshold type

☒ **Static**
Use a value as a threshold

☐ **Anomaly detection**
Use a band as a threshold

Whenever CPUUtilization is...
Define the alarm condition.

☒ **Greater**
> threshold

☐ **Greater/Equal**
≥ threshold

☐ **Lower/Equal**
≤ threshold

☐ **Lower**
< threshold

than...
Define the threshold value.

65

Must be a number

► **Additional configuration**

Cancel

Next

Alarm state trigger

Define the alarm state that will trigger this action.

☒ **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.

Remove

Send a notification to the following 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 to notify other accounts

Create a new topic...

The topic name must be unique.

Default_CloudWatch_Alarms_Topic

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.

shuklasiddharth945@gmail.com

user1@example.com, user2@example.com

Create topic

Add notification

Create a topic – next – name the alarm review and create alarm.

Check your email – confirm subscription.



Simple Notification Service

Subscription confirmed!

You have successfully subscribed.

Your subscription's id is:

arn:aws:sns:eu-north-1:170303796048:Default_CloudWatch_Alarms_Topic:b2799021-d4f7-40d6-8546-a7fac317ca55

If it was not your intention to subscribe, [click here to unsubscribe](#).

For creating the billing alarm you need to go the North Virginia region specifically – choose billing create billing alarm rest the steps are same .



New Feature

Amazon SNS now supports in-place message archiving and replay for FIFO topics. [Learn more](#)



[Amazon SNS](#) > Subscriptions

Subscriptions (2)

Edit

Delete

Request confirmation

Confirm subscription

Create subscription

Search

< 1 > ⚙

	ID	Endpoint	Status	Protocol	Topic
<input type="radio"/>	b2799021-d4f7-40d6-8...	shuklasiddharth945@g...	✔ Confirmed	EMAIL	Default_CloudWatch_Alar...
<input type="radio"/>	69bae10d-f821-45c5-bf...	shuklasiddharth65@gm...	✔ Confirmed	EMAIL	highcpu