





1) Enable CloudTrail monitoring and store the events in s3 and CloudWatch log events.

Trails									
<div> <div>Copy events to Lake</div> <div>  </div> <div>Delete</div> <div>Create trail</div> </div>									
Name ▲	Home region ▼	Multi-region trail ▼	ARN ▼	Insights ▼	Organization trail ▼	S3 bucket ▼	Log file prefix ▼	CloudWatch Logs group ▼	Status ▼
 management-trail	US East (N. Virginia)	Yes	arn:aws:cloudtrail:us-east-1:866018956544:trail/management-trail	Disabled	No	aws-cloudtrail-logs-866018956544-5996f7fe 	-	arn:aws:logs:us-east-1:866018956544:log-group:aws-cloudtrail-logs-866018956544-fa42db78*	 Logging

2) Enable SNS for CloudTrail to send alert on email.

mytopic06

> Subscription: ebd2aa2c5-ce79-48b0-b77e-f1a53b6f7374

New Feature

Amazon SNS now supports High Throughput FIFO topics. [Learn more](#)

Subscription: ebd2aa2c5-ce79-48b0-b77e-f1a53b6f7374

Edit

Delete

Details

ARN

arn:aws:sns:us-east-1:866018956544:mytopic06:ebd2aa2c5-ce79-48b0-b77e-f1a53b6f7374

Endpoint

deegojusushma23@gmail.com

Topic

mytopic06

Subscription Principal

arn:aws:iam::866018956544:root

Status

Confirmed

Protocol

EMAIL



Simple Notification Service

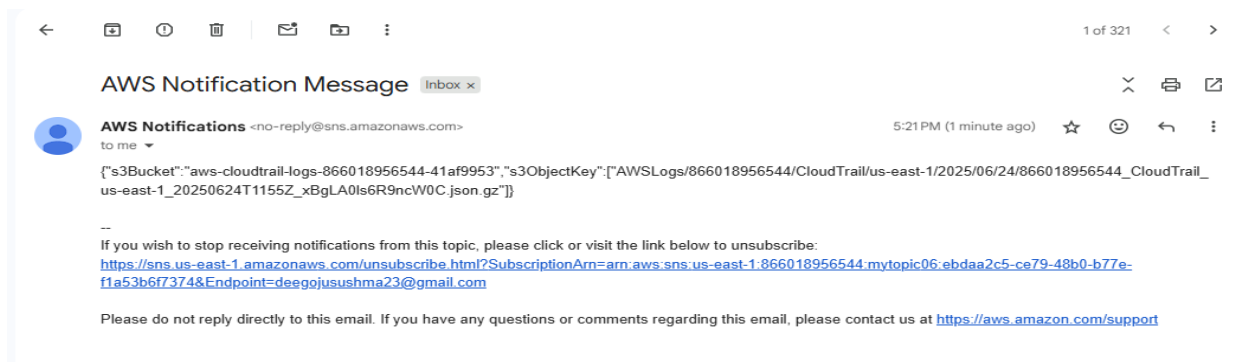
Subscription confirmed!

You have successfully subscribed.

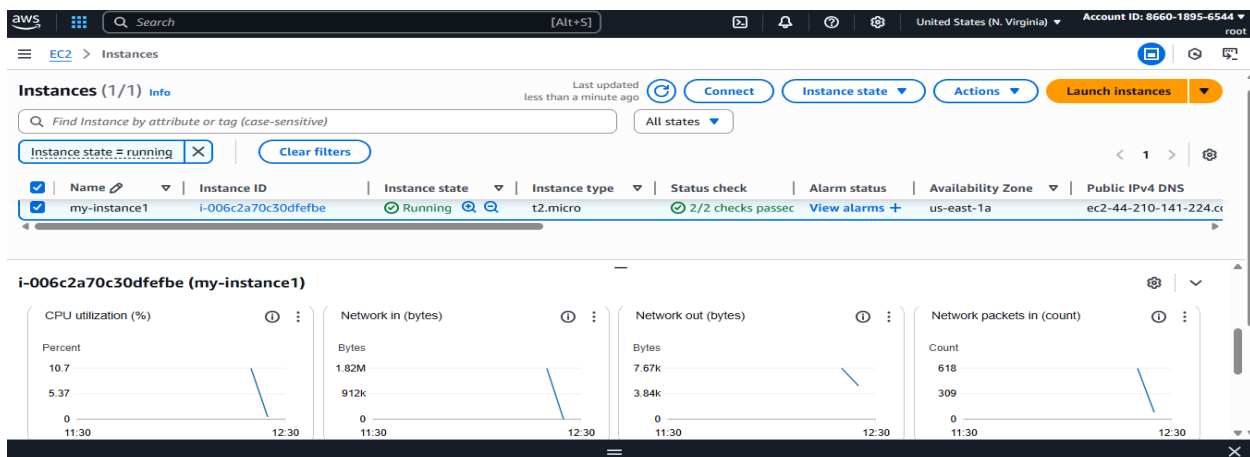
Your subscription's id is:

arn:aws:sns:us-east-1:866018956544:mytopic06:ebdaa2c5-ce79-48b0-b77e-f1a53b6f7374

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



3) Configure cloud watch monitoring and record the CPU utilization and other metrics of ec2.



4) Create one alarm to send alert to email if the CPU utilization is more than 70 percent.

EC2 > Instances

Instances (1/1) Info

Last updated less than a minute ago

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

Instance state = running

Clear filters

Name

Instance ID

Instance state

Instance type

Status check

Alarm status

Availability Zone

Public IPv4 DNS

my-instance1

i-006c2a70c30dfebe

Running

t2.micro

2/2 checks passed

1 in al...

us-east-1a

ec2-44-210-141-224.c...

i-006c2a70c30dfebe (my-instance1)

Details

Status and alarms

Monitoring

Security

Networking

Storage

Tags

CloudWatch agent metrics

The monitoring tab will now include metrics related to a single instance in the CWAgent namespace. If you want metrics that are emitted from the CloudWatch agent to be displayed, include them in the CWAgent namespace.

aws

Search

[Alt+S]

United States (N. Virginia)

Account ID: 8660-1895-6544

root

Amazon SNS > Topics > mytopic

Details

Dashboard

Topics

Subscriptions

Mobile

Push notifications

Text messaging (SMS)

Name

mytopic

Display name

ARN

arn:aws:sns:us-east-1:866018956544:mytopic

Topic owner

866018956544

Type

Standard

Subscriptions

Access policy

Data protection policy

Delivery policy (HTTP/S)

Delivery status logging

Subscriptions (1)

Edit

Delete

Request confirmation

Confirm subscription

Create subscription

ID

Endpoint

Status

Protocol

bc99d184-3cac-46e5-93ae...

deegojusushma23@gmail.com

Confirmed

EMAIL

CloudWatch > Alarms > cpuutilization exceeded

Alarms

cpuutilization exceeded

View

Investigate

Actions

Explore related

Graph

3h

1d

1w

UTC timezone

CPUUtilization

CPUUtilization > 70 for 1 datapoints within 5 minutes

In alarm

Percent

100

50.2

0.493

10:15

10:30

10:45

11:00

11:15

11:30

11:45

12:00

12:15

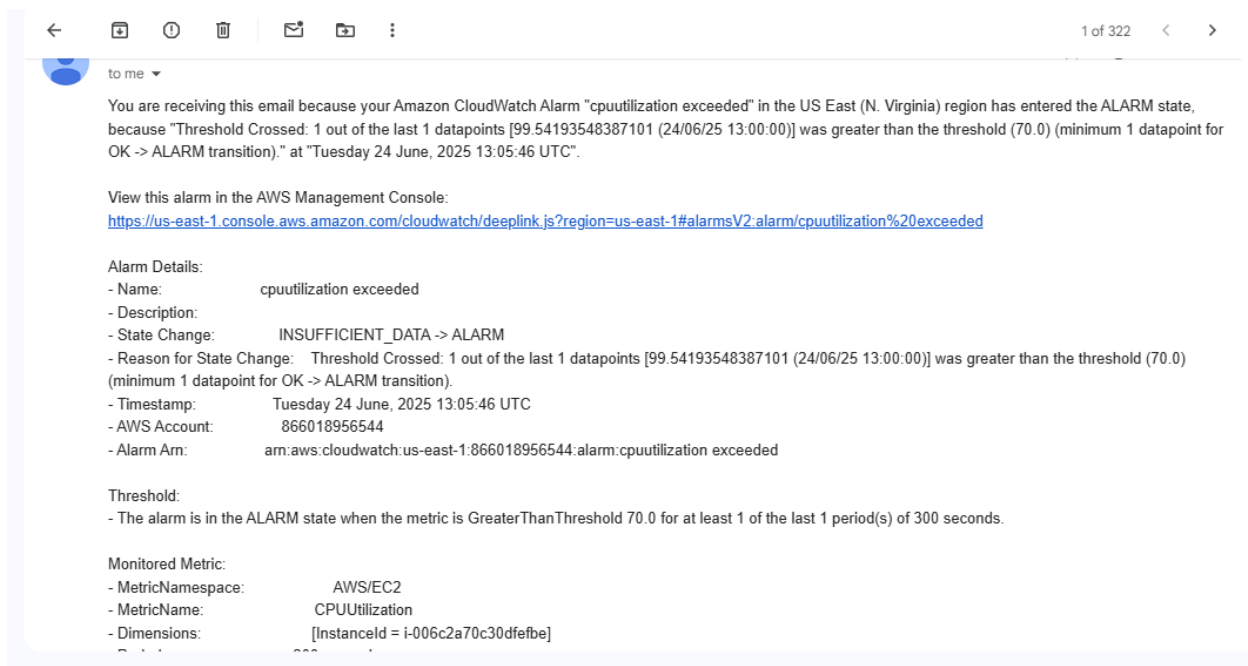
12:30

12:45

13:00

CPUUtilization

Click timeline to see the state change at the selected time.



5) Create Dashboard and monitor tomcat service whether it is running or not and send the alert.

Search [Alt+S] United States (N. Virginia) Account ID: 8660-1895-6544 root

> Instances > i-0575aafcb22dd6895

Instance summary for i-0575aafcb22dd6895 (my-instance01) Info

Updated less than a minute ago

[Connect](#) [Instance state](#) [Actions](#)

Instance ID i-0575aafcb22dd6895	Public IPv4 address 3.86.180.240 open address	Private IPv4 addresses 172.31.80.45
IPv6 address -	Instance state Running	Public DNS ec2-3-86-180-240.compute-1.amazonaws.com open address
Hostname type IP name: ip-172-31-80-45.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-80-45.ec2.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 3.86.180.240 [Public IP]	VPC ID vpc-0bf26856e580d895b	

```
bootstrap.jar  ciphers.bat  configtest.bat  digest.sh  setclasspath.sh  startup.sh  tool-wrapper.bat
catalina.bat  ciphers.sh  configtest.sh  makebase.bat  shutdown.bat  tomcat-juli.jar  version
catalina.sh  commons-daemon.jar  daemon.sh  makebase.sh  shutdown.sh  tomcat-native.tar.gz  version
catalina-tasks.xml  commons-daemon-native.tar.gz  digest.bat  setclasspath.bat  startup.bat

[root@ip-172-31-80-45 bin]# bash startup.sh
Using CATALINA_BASE: /opt/apache-tomcat-9.0.106
Using CATALINA_HOME: /opt/apache-tomcat-9.0.106
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.106/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.106/bin/bootstrap.jar:/opt/apache-tomcat-9.0.106/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-80-45 bin]# cd /opt/aws/
[root@ip-172-31-80-45 aws]# ls
amazon-cloudwatch-agent  apitools  bin
[root@ip-172-31-80-45 aws]# cd bin/
[root@ip-172-31-80-45 bin]# ls
cfn-elect-cmd-leader  cfn-hup  cfn-send-cmd-event  cfn-signal  eic_curl_authorized_keys  eic_run_authorized_keys
cfn-get-metadata  cfn-init  cfn-send-cmd-result  ec2-metadata  eic_parse_authorized_keys
[root@ip-172-31-80-45 bin]# ll
total 28
lrwxrwxrwx 1 root root 45 Jun 10 23:52 cfn-elect-cmd-leader -> ../apitools/cfn-init/bin/cfn-elect-cmd-leader
lrwxrwxrwx 1 root root 41 Jun 10 23:52 cfn-get-metadata -> ../apitools/cfn-init/bin/cfn-get-metadata
lrwxrwxrwx 1 root root 32 Jun 10 23:52 cfn-hup -> ../apitools/cfn-init/bin/cfn-hup
```

Not secure 3.86.180.240:8080

Home Documentation Configuration Examples Wiki Mailing Lists

Find Help

Apache Tomcat/9.0.106

APACHE SOFTWARE FOUNDATION
http://www.apache.org/

If you're seeing this, you've successfully installed Tomcat. Congratulations!



Recommended Reading:

[Security Considerations How-To](#)

[Manager Application How-To](#)

[Clustering/Session Replication How-To](#)

[Server Status](#)

[Manager App](#)

[Host Manager](#)

Developer Quick Start

[Tomcat Setup](#)

[First Web Application](#)

[Realms & AAA](#)

[JDBC DataSources](#)

[Examples](#)

[Servlet Specifications](#)

[Tomcat Versions](#)

Managing Tomcat

For security, access to the [manager webapp](#) is restricted. Users are defined in:

`$CATALINA_HOME/conf/tomcat-users.xml`

In Tomcat 9.0 access to the manager application is split between different users. [Read more...](#)

Release Notes

[Changelog](#)

Documentation

[Tomcat 9.0 Documentation](#)

[Tomcat 9.0 Configuration](#)

[Tomcat Wiki](#)

Find additional important configuration information in:

`$CATALINA_HOME/RUNNING.txt`

Developers may be interested in:

Getting Help

[FAQ and Mailing Lists](#)

The following mailing lists are available:

[tomcat-announce](#)
Important announcements, releases, security vulnerability notifications. (Low volume).

[tomcat-users](#)

User support and discussion

[taolibs-user](#)

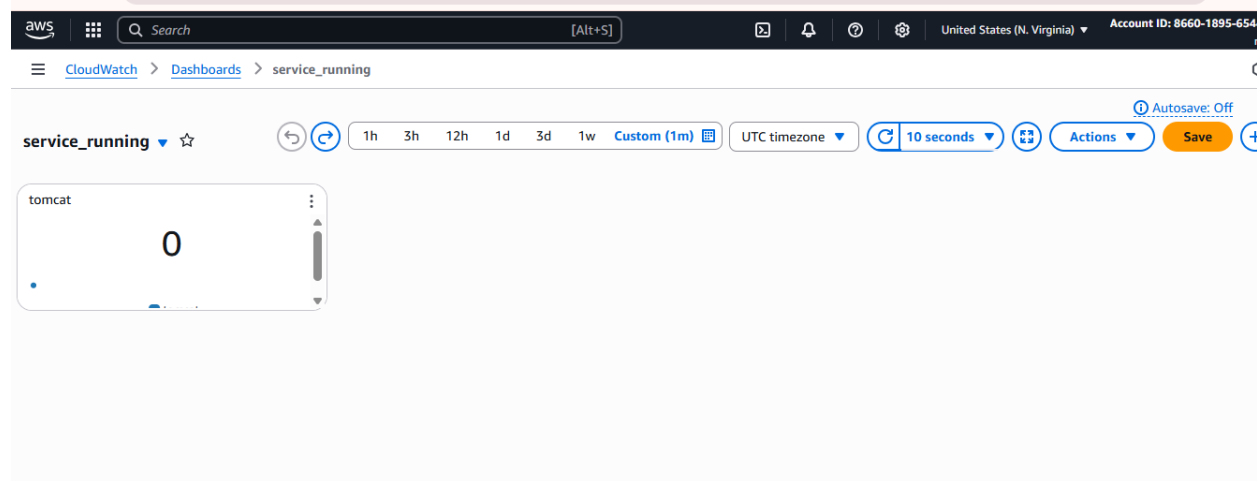
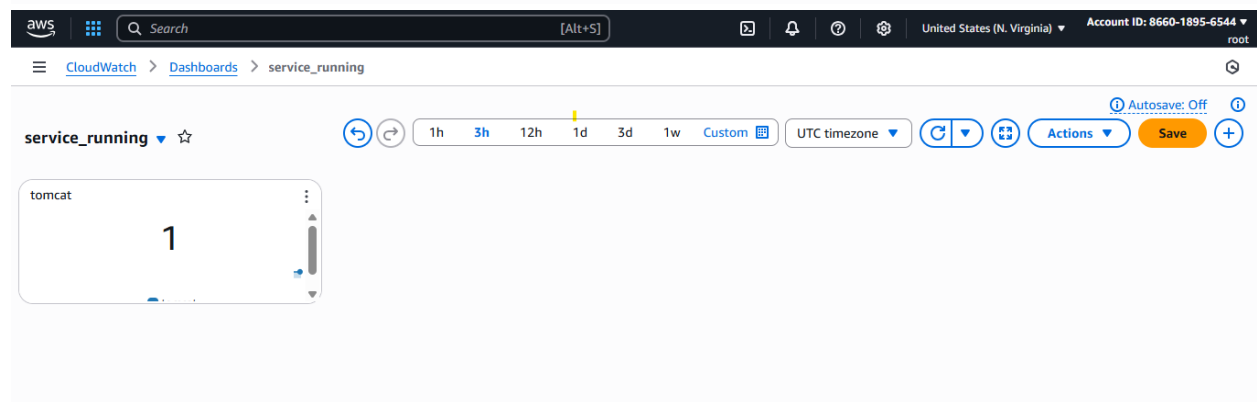
User support and discussion for [Apache Taolibs](#)

```
wal
wafv2
worklink
workmailmessageflow
xray
s3
deploy
opsworks-cm
history

wal-Regional
workdocs
workmail
workspaces
s3api
configure
configservice
runtime.sagemaker
help

Invalid choice: 'cloudWatch', maybe you meant:

* cloudwatch
[root@ip-172-31-80-45 ~]# vi monitoring.bash
[root@ip-172-31-80-45 ~]# chmod 755 monitoring.bash
[root@ip-172-31-80-45 ~]# bash monitoring.bash
[root@ip-172-31-80-45 ~]# aws configure
AWS Access Key ID [*****G2M7]: AKIA4TIWASUAM34EYJEA
AWS Secret Access Key [*****+1QI]: 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
Default region name [us-east-1]: us-east-1
Default output format [json]: json
[root@ip-172-31-80-45 ~]# bash monitoring.bash
[root@ip-172-31-80-45 ~]#
```



6) Create Dashboard and monitor nginx service to send the alert if nginx is not running.



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

```

  ~ ~ \#####\
  ~ ~ \###|      AL2 End of Life is 2026-06-30.
  ~ ~ \#/
  ~ ~ V~' '->
  ~ ~
  ~ ~ \
  ~ ~ /      A newer version of Amazon Linux is available!
  ~ ~ /
  ~ ~ /      Amazon Linux 2023, GA and supported until 2028-03-15.
  ~ ~ /m/      https://aws.amazon.com/linux/amazon-linux-2023/

```

5 package(s) needed for security, out of 5 available

Run "sudo yum update" to apply all updates.

```
[ec2-user@ip-172-31-80-45 ~]$ sudo so
```

sudo: so: command not found

```
[ec2-user@ip-172-31-80-45 ~]$ sudo su
```

```
[root@ip-172-31-80-45 ec2-user]# sudo systemctl enable nginx
```

```
[root@ip-172-31-80-45 ec2-user]# sudo systemctl status nginx
```

```

● nginx.service - The nginx HTTP and reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; vendor preset: disabled)
   Active: active (running) since Thu 2025-06-26 07:55:44 UTC; 58min ago
     Main PID: 10465 (nginx)
    CGroup: /system.slice/nginx.service
            └─10465 nginx: master process /usr/sbin/nginx
               └─10467 nginx: worker process

```

```
[root@ip-172-31-80-45 ec2-user]# chmod 755 nginx_running.bash
```

```
[root@ip-172-31-80-45 ec2-user]# vi nginx_running.bash
```

```
[root@ip-172-31-80-45 ec2-user]# chmod 755 nginx_running.bash
```

```
[root@ip-172-31-80-45 ec2-user]# bash nginx_running.bash
```

```
[root@ip-172-31-80-45 ec2-user]# aws confiure
```

Note: AWS CLI version 2, the latest major version of the AWS CLI, is now stable and recommended for general use. For more information, see the AWS CLI version 2 installation instructions at: <https://docs.aws.amazon.com/cli/latest/userguide/install-cliv2.html>

usage: aws [options] <command> [<subcommand> ...] [parameters]

To see help text, you can run:

```

aws help
aws <command> help
aws <command> <subcommand> help

```

aws: error: argument command: Invalid choice, valid choices are:

accessanalyzer	acm
acm-pca	alexaforbusiness
amplify	apigateway
apigatewaymanagementapi	apigatewayv2
appconfig	appflow
application-autoscaling	application-insights
appmesh	appstream
appsync	athena

aws	synthetics
textract	transcribe
transfer	translate
waf	waf-regional
wafv2	workdocs
worklink	workmail
workmailmessageflow	workspaces
xray	s3api
s3	configure
deploy	configservice
opsworks-cm	runtime.sagemaker
history	help

Invalid choice: 'confiure', maybe you meant:

```

* configure
[root@ip-172-31-80-45 ec2-user]# aws configure
AWS Access Key ID [*****YJEA]: AKIA4TIWASUANUDUJSGB
AWS Secret Access Key [*****WpS6]: 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
Default region name [us-east-1]: us-east-1
Default output format [json]: json
[root@ip-172-31-80-45 ec2-user]# bash nginx_running.bash
[root@ip-172-31-80-45 ec2-user]#

```