

# LAB | Create a CloudWatch Alarm

## Create an EC2 Instance

The screenshot shows the AWS EC2 Instances details page for instance i-08529b70958e83280. The instance is currently running and has a public IP address of 54.176.14.175. It is associated with a VPC ID (vpc-07de2f3d17f75a024) and a subnet ID (subnet-044ffe20ae234e67). The instance type is t2.micro. The instance ARN is arn:aws:ec2:us-west-1:686699774218:instance/i-08529b70958e83280. The instance summary indicates it was updated 5 minutes ago.

## CloudWatch alarm configuration

The screenshot shows the CloudWatch Metrics Alarm configuration page for the alarm 'cpu\_test\_vijaya'. The alarm is currently in an 'In alarm' state. The threshold is set to CPUUtilization > 70 for 1 datapoints within 5 minutes. The metric name is CPUUtilization, and the instance ID is i-08529b70958e83280. The instance name is cw-alarm-lab-vijaya, and the statistic is Average. The period is 5 minutes. The alarm has 1 out of 1 datapoints to alarm. The missing data treatment is 'Treat missing data as missing'. The ARN is arn:aws:cloudwatch:us-west-1:686699774218:alarm:cpu\_test\_vijaya. The last state update was on 2026-01-22 13:48:06 (UTC). Actions are enabled.

## SNS email notification

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2:

You have chosen to subscribe to the topic:

**arn:aws:sns:us-west-1:686699774218:cpu\_alert-vijaya**

To confirm this subscription, click or visit the link below (If this was in error no action is necessary):

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```
[ec2-user@ip-172-31-28-226 ~]$ sudo yum -y install stress
Amazon Linux 2023 Kernel Livepatch repository
Dependencies resolved.
=====
Package           Architecture      Version       Repository      Size
=====
Installing:
stress            x86_64          1.0.7-2.amzn2023.0.1      amazonlinux    34 k
Transaction Summary
=====
Install 1 Package

Total download size: 34 k
Installed size: 68 k
Downloading Packages:
stress-1.0.7-2.amzn2023.0.1.x86_64.rpm
Total                                         504 kB/s | 34 kB   00:00
Downloaded packages:
stress-1.0.7-2.amzn2023.0.1.x86_64
Total                                         311 kB/s | 34 kB   00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Installing : stress-1.0.7-2.amzn2023.0.1.x86_64 1/1
Running scriptlet: stress-1.0.7-2.amzn2023.0.1.x86_64 1/1
Verifying   : stress-1.0.7-2.amzn2023.0.1.x86_64 1/1

Installed:
stress-1.0.7-2.amzn2023.0.1.x86_64

Complete!
```

SSH session running `stress` command

```
[ec2-user@ip-172-31-28-226 ~]$ stress --cpu 1
stress: info: [26559] dispatching hogs: 1 cpu, 0 io, 0 vm, 0 hdd
-
```

Alarm state change to "In Alarm"



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ALARM: "cpu\_test\_vijaya" in US West (N. California) Inbox x

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You are receiving this email because your Amazon CloudWatch Alarm "cpu\_test\_vijaya" in the US West (N. California) region has entered the ALARM state, because "Threshold Crossed: 1 out of the last 1 datapoints [99.9 (22/01/26 13:38:00)] was greater than the threshold (70.0) (minimum 1 datapoint for OK -> ALARM transition)." at "Thursday 22 January, 2026 13:48:06 UTC".

View this alarm in the AWS Management Console:  
[https://us-west-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=us-west-1#alarmsV2/alarm/cpu\\_test\\_vijaya](https://us-west-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=us-west-1#alarmsV2/alarm/cpu_test_vijaya)

Alarm Details:

- Name: cpu\_test\_vijaya
- Description:
- State Change: OK -> ALARM
- Reason for State Change: Threshold Crossed: 1 out of the last 1 datapoints [99.9 (22/01/26 13:38:00)] was greater than the threshold (70.0) (minimum 1 datapoint for OK -> ALARM transition).
- Timestamp: Thursday 22 January, 2026 13:48:06 UTC
- AWS Account: 6866699774218
- Alarm Arn: arn:aws:cloudwatch:us-west-1:6866699774218:alarm:cpu\_test\_vijaya

Threshold:

- The alarm is in the ALARM state when the metric is GreaterThanThreshold 70.0 for at least 1 of the last 1 period(s) of 300 seconds.

Monitored Metric:

- MetricNamespace: AWS/EC2
- MetricName: CPUUtilization
- Dimensions: [InstanceId = i-08529b70958e83280]
- Period: 300 seconds
- Statistic: Average