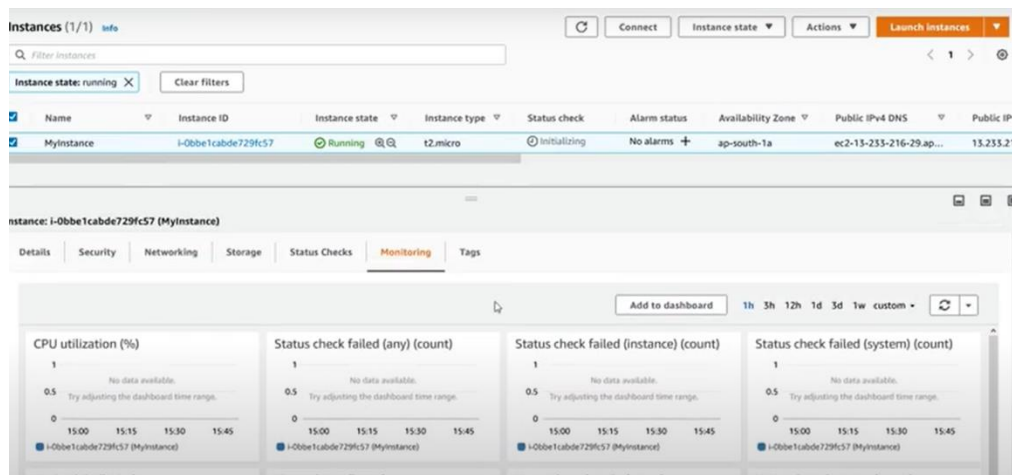
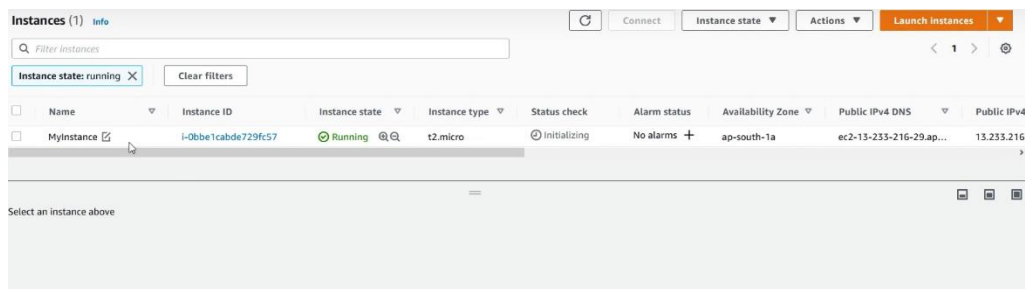
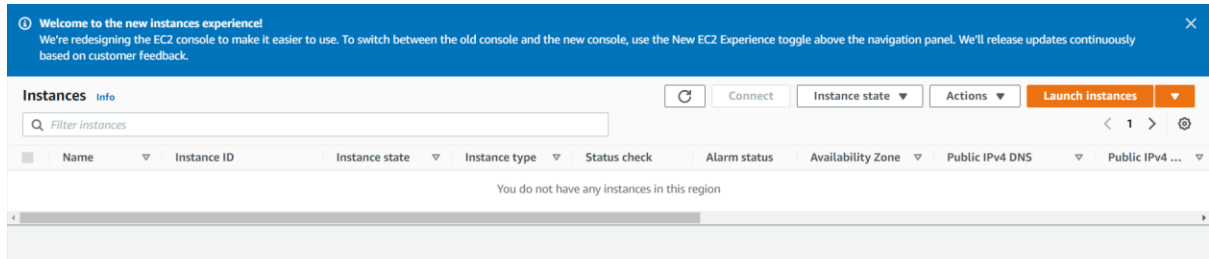
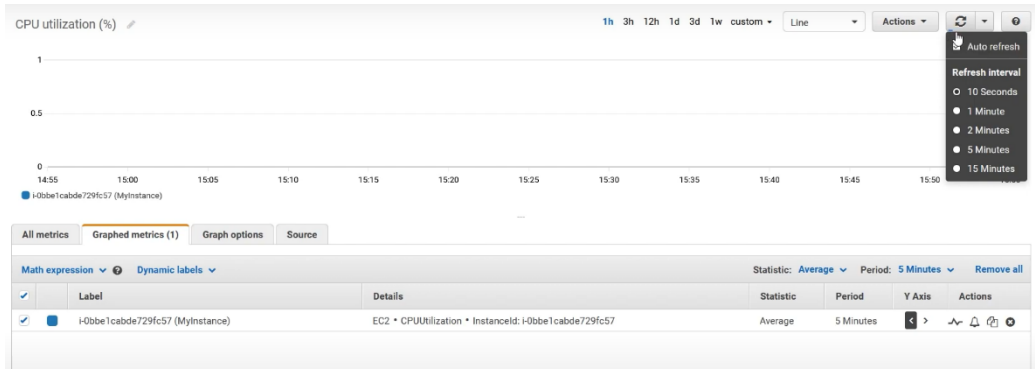


E18CSE028

Arnav Bansal

Lab 8





Create alarm

Specify metric and conditions

Metric Edit

Graph
This alarm will trigger when the blue line goes above the red line for 1 datapoints within 5 minutes.

Percent

0.15

0.1

0.05

0

13:30 14:30 15:30

i-0bbe1cabde729fc57 (MyInstance)

Namespace
AWS/EC2

Metric name
CPUUtilization

InstanceId
i-0bbe1cabde729fc57

Instance name
MyInstance

Statistic
Average

Period
5 minutes

Specify metric and conditions

Metric Edit

Graph
This alarm will trigger when the blue line goes above the red line for 1 datapoints within 1 minute.

Percent

0.15

0.1

0.05

0

13:30 14:30 15:30

i-0bbe1cabde729fc57 (MyInstance)

Namespace
AWS/EC2

Metric name
CPUUtilization

InstanceId
i-0bbe1cabde729fc57

Instance name
MyInstance

Statistic
Average

Period
1 minute

Configure actions

Notification

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.

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

Send a notification to...

Select an email list

Only email lists for this account are available.

Add notification

Remove

Amazon SNS > Topics > Default_CloudWatch_Alarms_Topic

Default_CloudWatch_Alarms_Topic

Edit Delete Publish message

Details

Name
Default_CloudWatch_Alarms_Topic

Display name
-

ARN
arn:aws:sns:south-1:437433101387:Default_CloudWatch_Alarms_Topic

Topic owner
437433101387

Type
Standard

Subscriptions Access policy Delivery retry policy (HTTP/S) Delivery status logging Encryption Tags

Subscriptions (1)

Edit Delete Request confirmation Confirm subscription Create subscription

Search

ID	Endpoint	Status	Protocol
ad5a78aa-5dc2-41fe-86ff-7d31f4283be7	boxtupsam@pythoholic.com	Confirmed	EMAIL

Create alarm

Preview and create

Step 1: Specify metric and conditions Edit

Metric

Graph
This alarm will trigger when the blue line goes above the red line for 1 datapoints within 1 minute.

Namespace
AWS/EC2

Metric name
CPUUtilization

InstanceId
i-0bbe1cabde729fc57

Instance name
MyInstance

Statistic
Average

Period
1 minute

Alarms (1)

Search

Any state

Any type

Hide Auto Scaling alarms

< 1 >

Ec2AlarmEmail

Metric alarm

Insufficient data

Ec2AlarmEmail

0.082

Details

Name Ec2AlarmEmail	State Insufficient data	Namespace AWS/EC2	Datapoints to alarm 1 out of 1
Type Metric alarm	Threshold CPUUtilization > 0.6 for 1 datapoints within 1 minute	Metric name CPUUtilization	Missing data treatment Treat missing data as missing
Description No description	Last change 2021-01-06 16:08:31	InstanceId i-0bbe1cabde729fc57	Percentiles with low samples evaluate
		Instance name MyInstance	ARN arn:aws:cloudwatch:ap-south-1:437433101387:alarm:Ec2AlarmEmail
		Statistic Average	
		Period 1 minute	

Ec2AlarmEmail

1h 3h 12h 1d 3d 1w custom Line Actions

Percent

0.6 CPUUtilization > 0.6 for 1 datapoints within 1 minute (0.6)

0.333

0.067

13:10 13:15 13:20 13:25 13:30 13:35 13:40 13:45 13:50 14:00 14:05 14:10 14:15 14:20 14:25 14:30 14:35 14:40 14:45 14:50 14:55 15:00 15:05 15:10 15:15 15:20 15:25 15:30 15:35 15:40 15:45 15:50 15:55 16:00 16:05

Graphed metrics (1)

Math expression Dynamic labels

Label	Details	Statistic	Period	Y Axis	Actions
CPUUtilization	EC2 * CPUUtilization * InstanceId: i-0bbe1cabde729fc57	Average	1 Minute		

Threshold:

- The alarm is in the ALARM state when the metric is GreaterThanThreshold 0.6 for 60 seconds.

Monitored Metric:

- MetricNamespace: AWS/EC2
- MetricName: CPUUtilization
- Dimensions: [InstanceId = i-0bbe1cabde729fc57]
- Period: 60 seconds
- Statistic: Average
- Unit: not specified
- TreatMissingData: missing

State Change Actions:

- OK:
- ALARM: [arn:aws:sns:ap-south-1:437433101387:Default_CloudWatch_Alarms_Topic]
- INSUFFICIENT_DATA:

You are receiving this email because your Amazon CloudWatch Alarm "Ec2AlarmEmail" in the Asia Pacific (Mumbai) region has entered the ALARM state, because "Threshold Crossed: 1 out of the last 1 datapoints [4.032786885245907 (06/01/21 16:09:00)] was greater than the threshold (0.6) (minimum 1 datapoint for OK -> ALARM transition)." at "Wednesday 06 January, 2021 16:14:57 UTC".

View this alarm in the AWS Management Console:

<https://ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#s=Alarms&alarm=Ec2AlarmEmail>

Alarm Details:

- Name: Ec2AlarmEmail
- Description:
- State Change: INSUFFICIENT_DATA -> ALARM
- Reason for State Change: Threshold Crossed: 1 out of the last 1 datapoints [4.032786885245907 (06/01/21 16:09:00)] was greater than the threshold (0.6) (minimum 1 datapoint for OK -> ALARM transition).
- Timestamp: Wednesday 06 January, 2021 16:14:57 UTC
- AWS Account: 437433101387
- Alarm Arn: arn:aws:cloudwatch:ap-south-1:437433101387:alarm:Ec2AlarmEmail

Threshold:

- The alarm is in the ALARM state when the metric is GreaterThanThreshold 0.6 for 60 seconds.

```
48 R4 available [ =stable ]
49 kernel-5.4 available [ =stable ]
50 selinux-ng available [ =stable ]
[ec2-user@ip-172-31-45-123 ~]$ sudo yum install stress
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
196 packages excluded due to repository priority protections
Resolving Dependencies
--> Running transaction check
--> Package stress.x86_64 0:1.0.4-16.el7 will be installed
--> Finished Dependency Resolution
```

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing: stress	x86_64	1.0.4-16.el7	epel	39 k

Transaction Summary

Install 1 Package

Total download size: 39 k

Installed size: 94 k

Is this ok [y/d/N]: y

Downloading packages:

Warning: /var/cache/yum/x86_64/2/epel/packages/stress-1.0.4-16.el7.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID 352c64e5: NOKEY

Public key for stress-1.0.4-16.el7.x86_64.rpm is not installed

stress-1.0.4-16.el7.x86_64.rpm | 39 kB 00:00:00

Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-7

Importing GPG key 0x352c64e5:

Userid : "Fedora EPEL (7) <epel@fedoraproject.org>"

Fingerprint: 91e9 7d7c 4a5e 96f1 7f3e 888f 6a2f aea2 352c 64e5

Package : epel-release-7-11.noarch (epeln2extra-epel)

```
Usage: stress [OPTION [ARG]] ...
-?, --help show this help statement
--version show version statement
-v, --verbose be verbose
-q, --quiet be quiet
-n, --dry-run show what would have been done
-t, --timeout N timeout after N seconds
--backoff N wait factor of N microseconds before work starts
-c, --cpu N spawn N workers spinning on sqrt()
-i, --io N spawn N workers spinning on sync()
-m, --vm N spawn N workers spinning on malloc()/free()
--vm-bytes B malloc B bytes per vm worker (default is 256MB)
--vm-stride B touch a byte every B bytes (default is 4096)
--vm-hang N sleep N secs before free (default none, 0 is inf)
--vm-keep redirty memory instead of freeing and reallocating
-d, --hdd N spawn N workers spinning on write()/unlink()
--hdd-bytes B write B bytes per hdd worker (default is 1GB)
```

Example: stress --cpu 8 --io 4 --vm 2 --vm-bytes 128M --timeout 10s

Note: Numbers may be suffixed with s,m,h,d,y (time) or B,K,M,G (size).

[ec2-user@ip-172-31-45-123 ~]\$ stress --cpu 2 --timeout 60

