



Monitoring and Observability on AWS

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Amazon Web Services

Observability describes how well you can **understand what is happening in a system**, often by instrumenting it to collect metrics, logs, and traces.

To **achieve operational excellence and meet business objectives**, you need to understand how your systems are performing.

Amazon CloudWatch



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Amazon CloudWatch

- **OBSERVABILITY OF YOUR AWS RESOURCES AND APPLICATIONS**



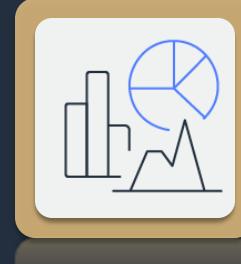
Observability on a single platform across accounts, applications and infrastructure



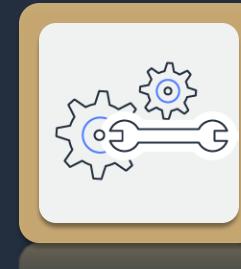
Easiest way to collect metrics in AWS and on-premises



Improve operational performance and resource optimization



Get operational visibility and insight



Derive actionable insights from logs

CloudWatch Logs

- **STORE LOGS IN NEAR REAL-TIME**

Collect logs from:

- Amazon EC2 instances
- On-premises servers
- VPC Flow Logs
- Other AWS Services

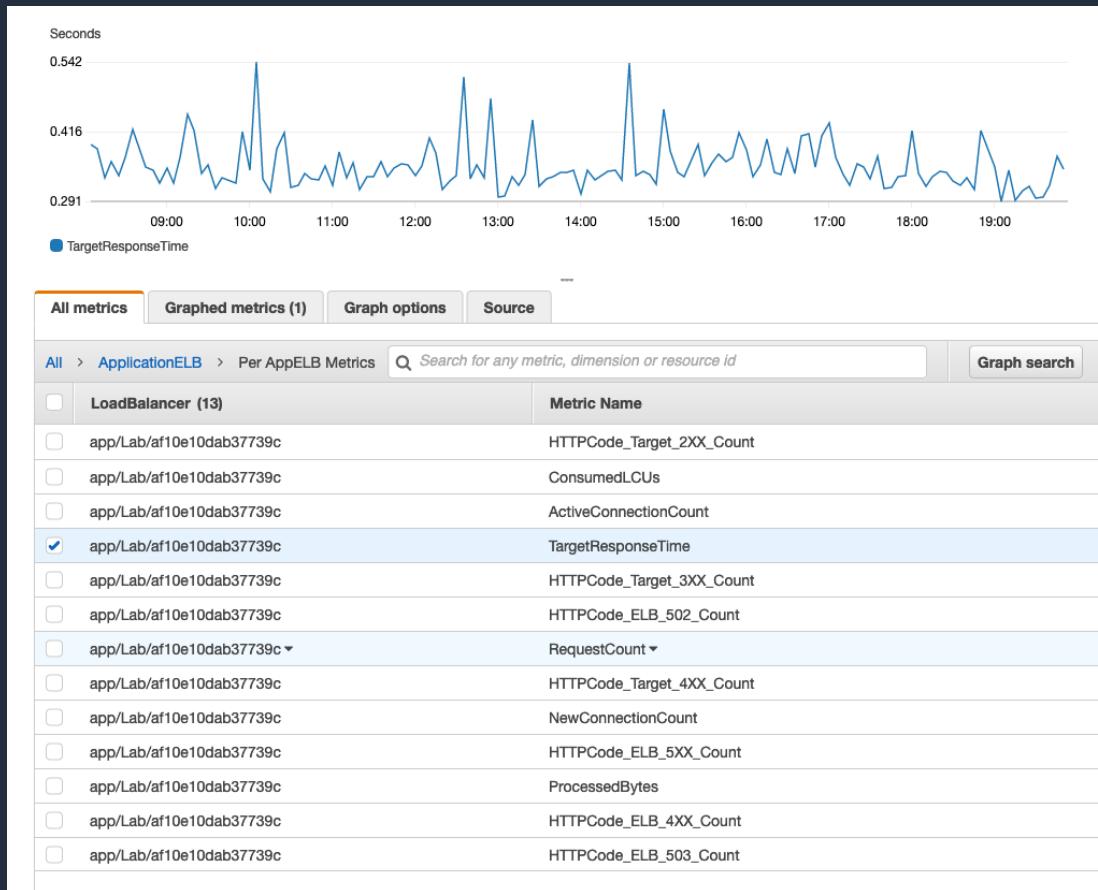
Log data can be stored and accessed indefinitely in highly durable, low-cost storage so you don't have to worry about filling up hard drives.

The screenshot shows the AWS CloudWatch Logs interface. At the top, the navigation path is CloudWatch > CloudWatch Logs > Log groups > application.log. There are buttons for Delete, Actions, Query log group, and View all log events. The main section displays 'Log group details' for 'application.log'. It includes fields for Retention (Never expire), Creation time (5 months ago), Stored bytes (14.67 MB), KMS key ID (-), Metric filters (1), Subscriptions (LambdaStream_centralized-logging-LogStreamer-1A2RQLPI4N1TW), and ARN (arn:aws:logs:eu-west-1:012345678910:log-group:application.log:*). Below this, tabs for Log streams, Metric filters, and Contributor Insights are shown. The 'Log streams' tab is selected, displaying a list of 5 log streams with columns for checkbox, Log stream name, and Last event time. The log streams listed are i-077f7e49ee1c0112c (1/10/2020, 8:00:49 PM), i-03343584efd07d2a6 (11/29/2019, 8:03:35 PM), i-09bd407810ebfa83f (11/29/2019, 8:00:52 PM), and i-0bf3c984cda70e7c0 (9/19/2019, 9:00:35 PM).

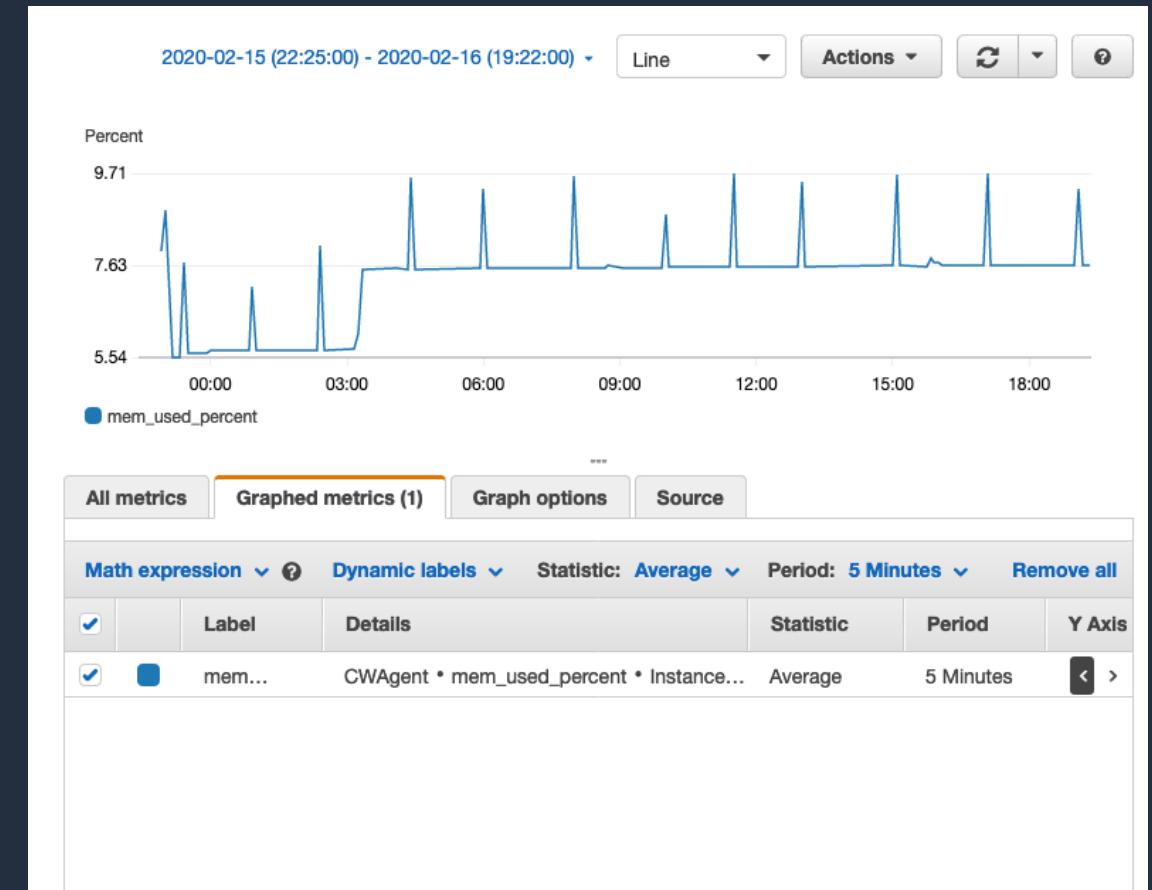
Log stream	Last event time
i-077f7e49ee1c0112c	1/10/2020, 8:00:49 PM
i-03343584efd07d2a6	11/29/2019, 8:03:35 PM
i-09bd407810ebfa83f	11/29/2019, 8:00:52 PM
i-0bf3c984cda70e7c0	9/19/2019, 9:00:35 PM

CloudWatch Metrics

Built-in metrics



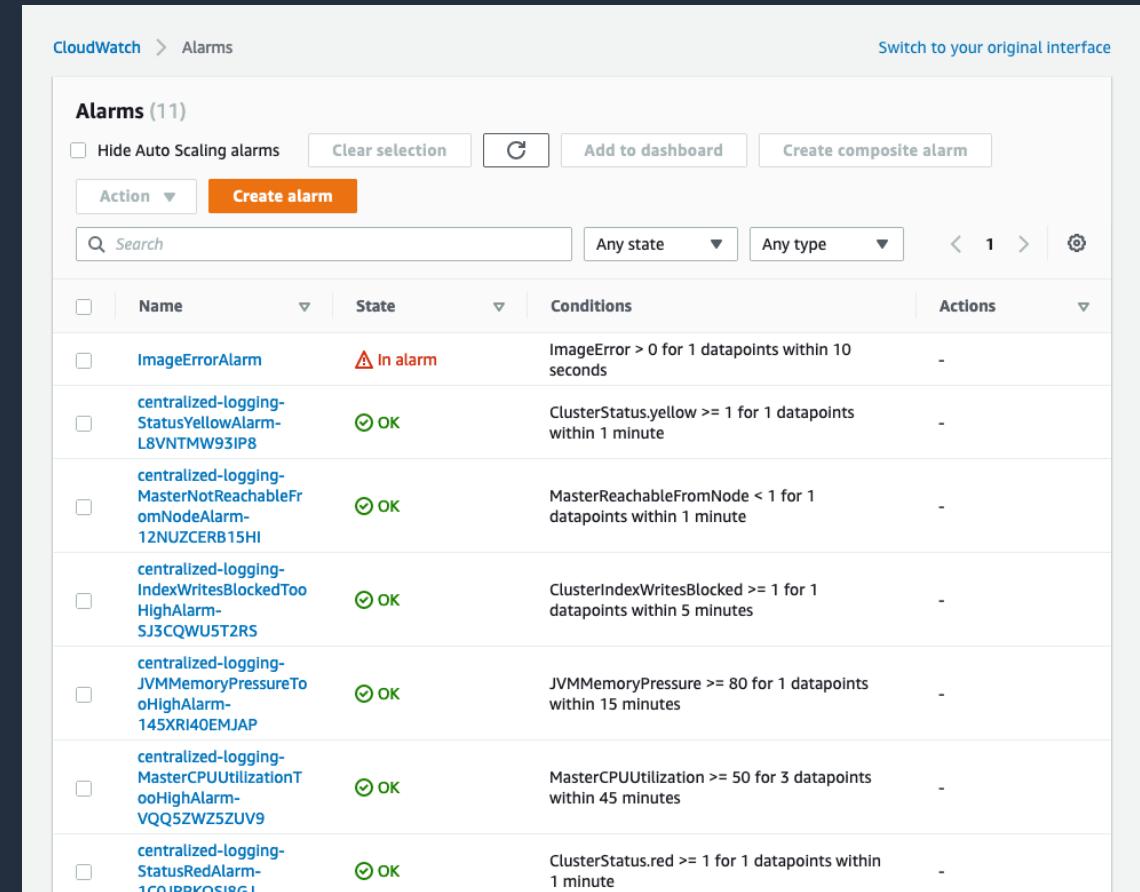
Custom metrics



CloudWatch Alarms

Amazon CloudWatch alarms allow you to set a threshold on metrics and trigger an action.

- Perform actions based on the value of metrics
- Add alarms to dashboards to visualize them
- Apply to hybrid and multi-cloud infrastructure



The screenshot shows the AWS CloudWatch Alarms console interface. At the top, there are buttons for 'Action' (dropdown), 'Create alarm' (orange button), 'Clear selection', 'Add to dashboard', and 'Create composite alarm'. Below this is a search bar and filters for 'Any state' and 'Any type'. The main area displays a table of 11 alarms, each with columns for Name, State, Conditions, and Actions. The alarms listed are:

Name	State	Conditions	Actions
ImageErrorAlarm	In alarm	ImageError > 0 for 1 datapoints within 10 seconds	-
centralized-logging-StatusYellowAlarm-LBVNTMW93IP8	OK	ClusterStatus.yellow >= 1 for 1 datapoints within 1 minute	-
centralized-logging-MasterNotReachableFromNodeAlarm-12NUZCERB15HI	OK	MasterReachableFromNode < 1 for 1 datapoints within 1 minute	-
centralized-logging-IndexWritesBlockedTooHighAlarm-SJ3CQWU5T2RS	OK	ClusterIndexWritesBlocked >= 1 for 1 datapoints within 5 minutes	-
centralized-logging-JVMMemoryPressureTooHighAlarm-145XR140EMJAP	OK	JVMMemoryPressure >= 80 for 1 datapoints within 15 minutes	-
centralized-logging-MasterCPUUtilizationTooHighAlarm-VQQ5ZWZ5ZUV9	OK	MasterCPUUtilization >= 50 for 3 datapoints within 45 minutes	-
centralized-logging-StatusRedAlarm-1C0JRPKOSIRGJ	OK	ClusterStatus.red >= 1 for 1 datapoints within 1 minute	-

CloudWatch Events

Provides a near real-time stream of system events that describe changes to your AWS resources.

Write rules to indicate which events are of interest to your application and what automated actions to take when a rule matches an event.

Rules > ChangelInstanceSize Actions ▾

Summary

ARN ⓘ arn:aws:events:eu-west-1:180304385487:rule/ChangelInstanceSize

Schedule Cron expression 0 6 ? * 6L *

Next 10 Trigger Date(s) 1. Fri, 28 Feb 2020 06:00:00 GMT
2. Fri, 27 Mar 2020 06:00:00 GMT
3. Fri, 24 Apr 2020 06:00:00 GMT
4. Fri, 29 May 2020 06:00:00 GMT
5. Fri, 26 Jun 2020 06:00:00 GMT
6. Fri, 31 Jul 2020 06:00:00 GMT
7. Fri, 28 Aug 2020 06:00:00 GMT
8. Fri, 25 Sep 2020 06:00:00 GMT
9. Fri, 30 Oct 2020 06:00:00 GMT
10. Fri, 27 Nov 2020 06:00:00 GMT

Status Enabled

Description

Monitoring Show metrics for the rule

Targets

Filter:

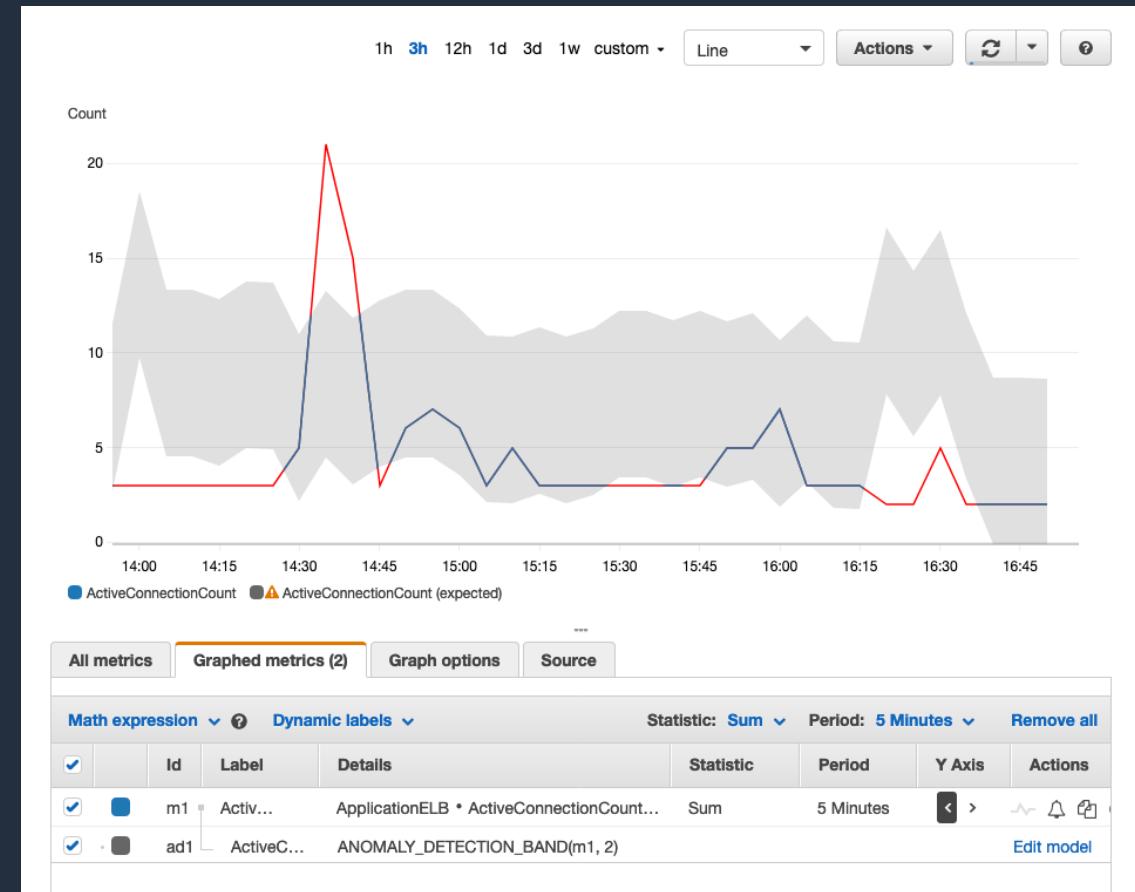
Type	Name	Input
SSM Automation	ChangelInstanceSize (version \$DEFAULT)	Constant: {"InstanceId": ["i-0cb0104ddf22a"]}



Anomaly Detection

When you enable anomaly detection for a metric, CloudWatch applies machine learning algorithms to the metric's past data to create a model of the metric's expected values.

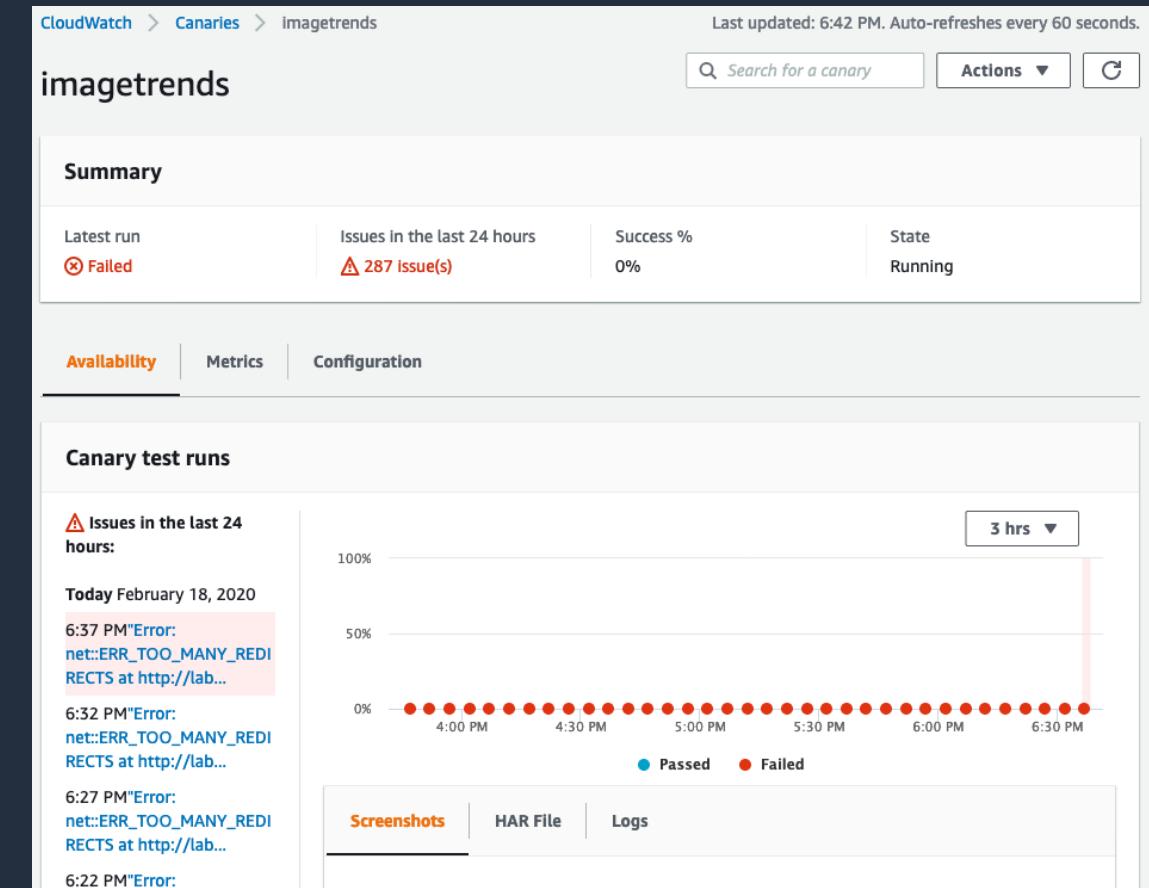
- Create alarms that auto-adjust thresholds based on natural metric patterns
- Alarm when the metric value is above or below the band, or both
- Visualize metrics with anomaly detection bands on dashboards



CloudWatch Synthetics

Runs tests on your endpoints every minute, 24x7, and alerts you as soon as your application endpoints don't behave as expected.

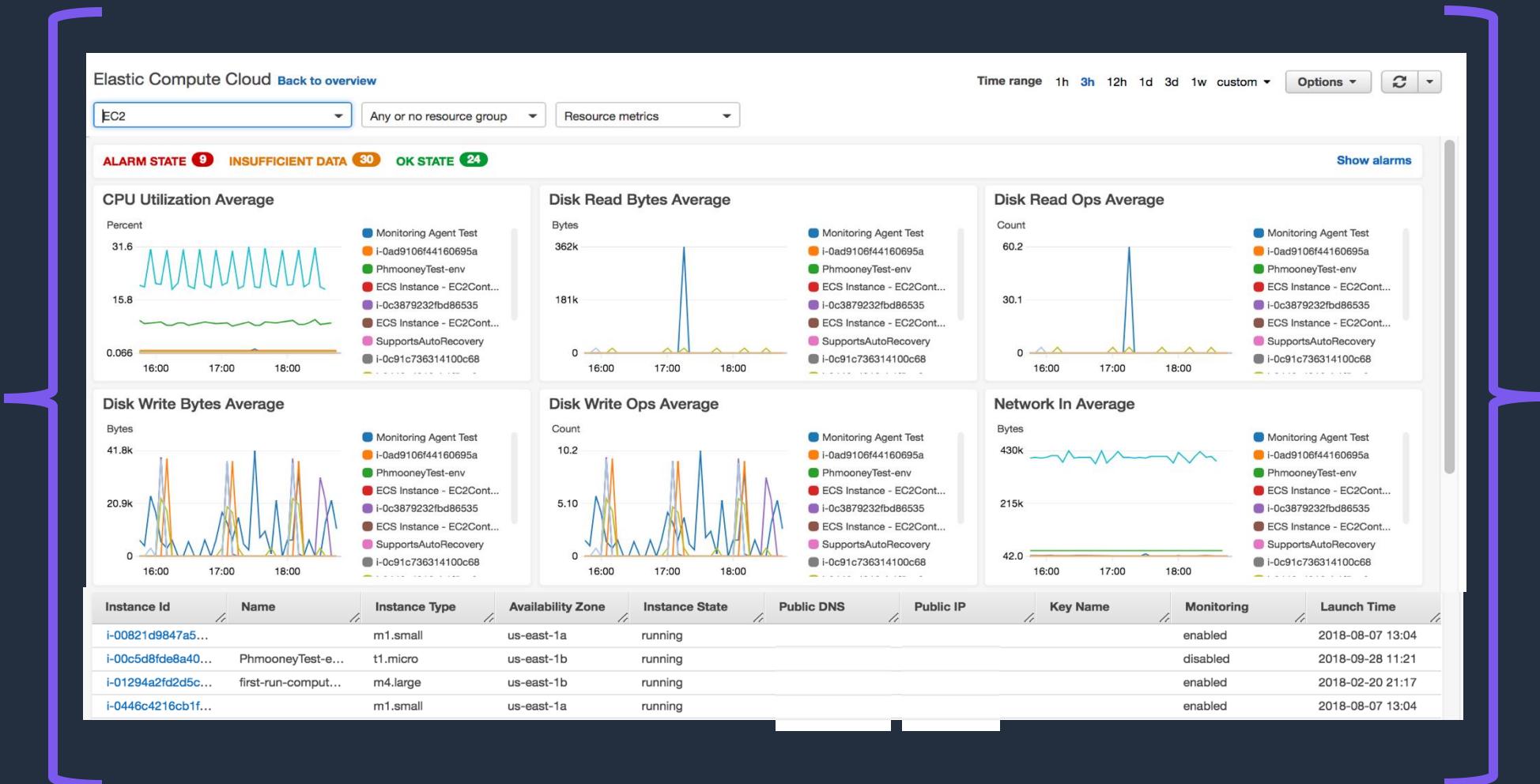
- View of your customers' experiences
- Configurable scripts
- Run on a schedule
- Check availability and latency
- Store load time data



CloudWatch Automatic Dashboards

- CloudWatch simplifies infrastructure monitoring with a default, getting started experience.

Dynamic, self-updating AWS infrastructure dashboards



AWS X-Ray

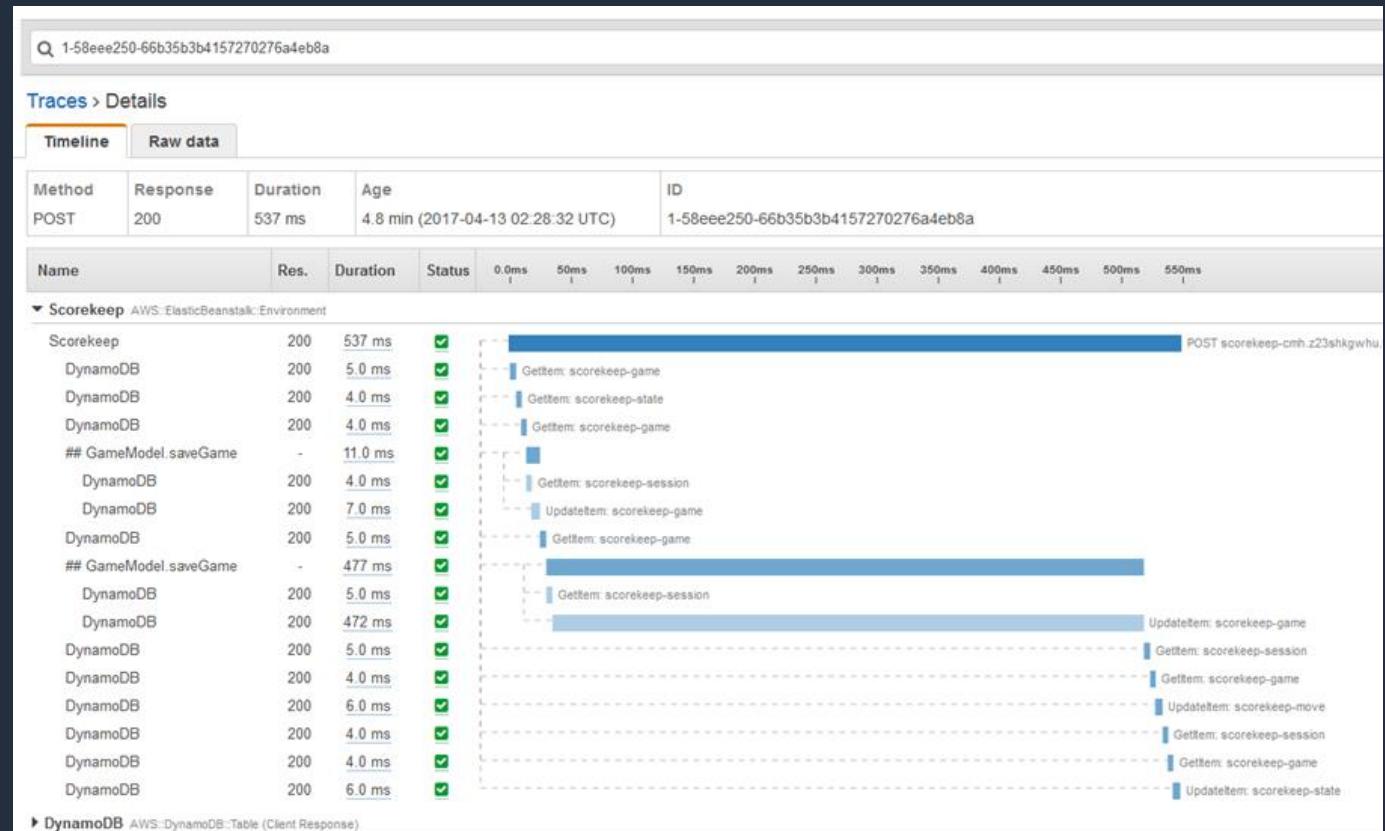


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End to End Tracing

Analyze the behavior of your applications.

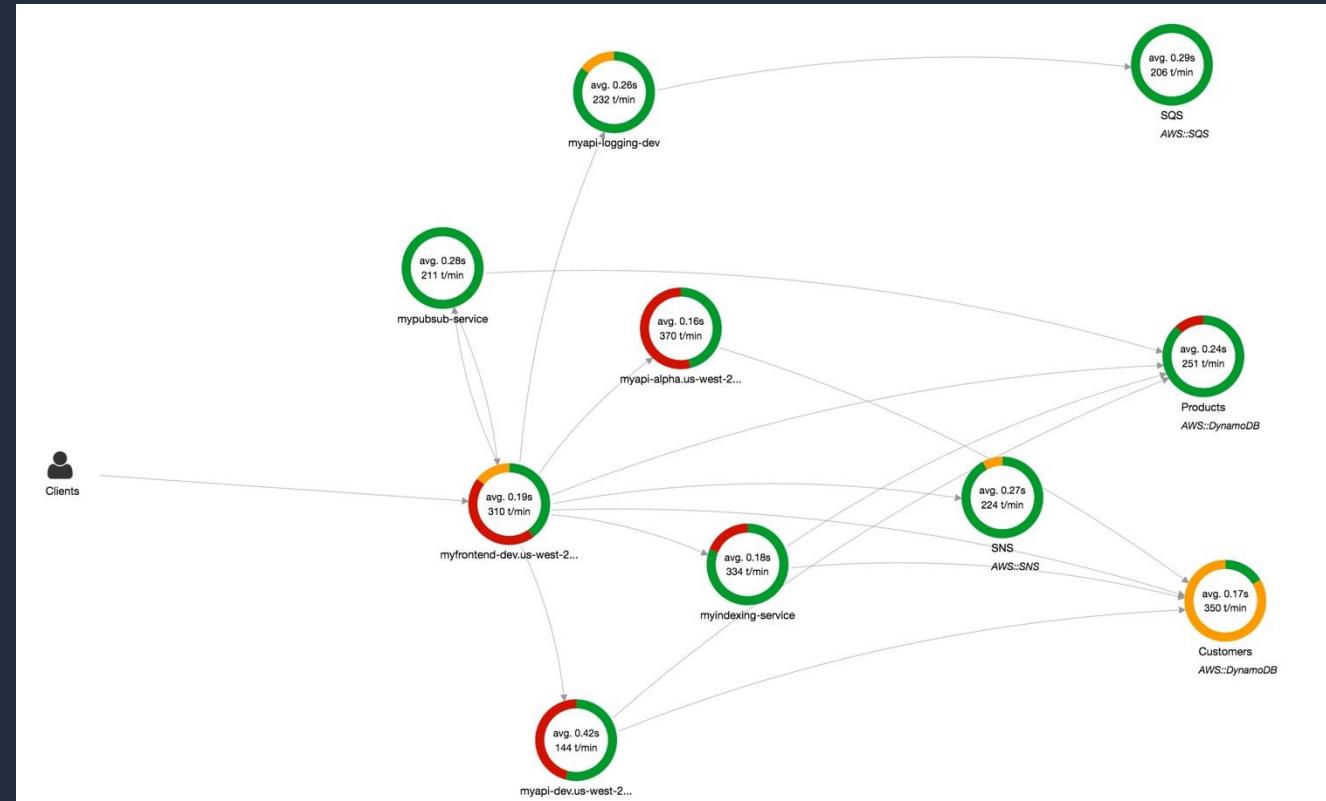
- Identify performance bottlenecks, edge case errors, and other hard to detect issues.
- Use this trace to follow the path of an individual request as it passes through each service in your application to pinpoint where issues are occurring.



Service Map

A map of services used by your application with trace data.

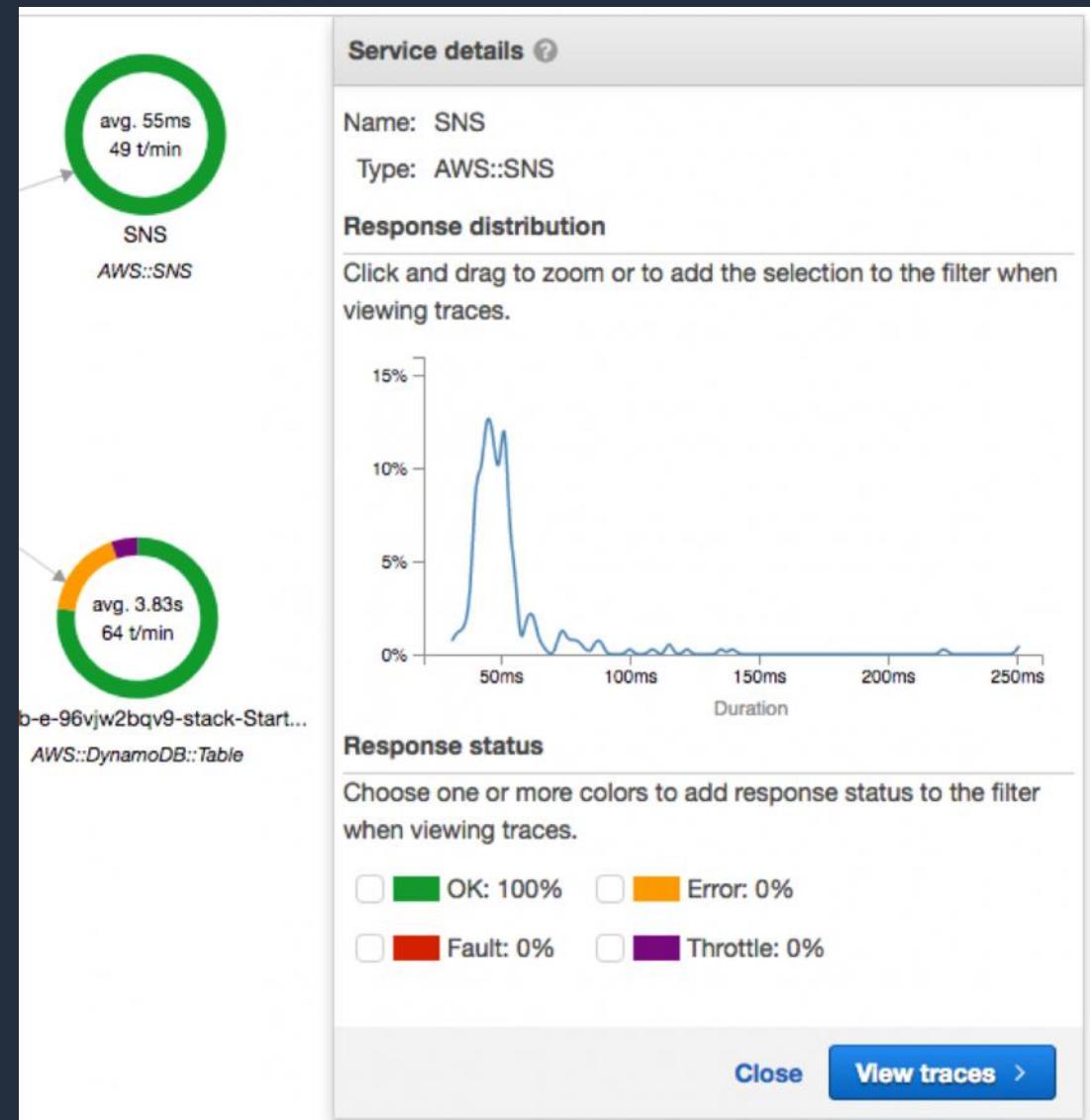
- This provides a view of connections between services in your application and aggregated data for each service, including average latency and failure rates.
- You can create dependency trees, perform cross-availability zone or region call detections, and more



Server and Client-Side Latency Detection

Visually detect node and edge latency distribution directly from the service map.

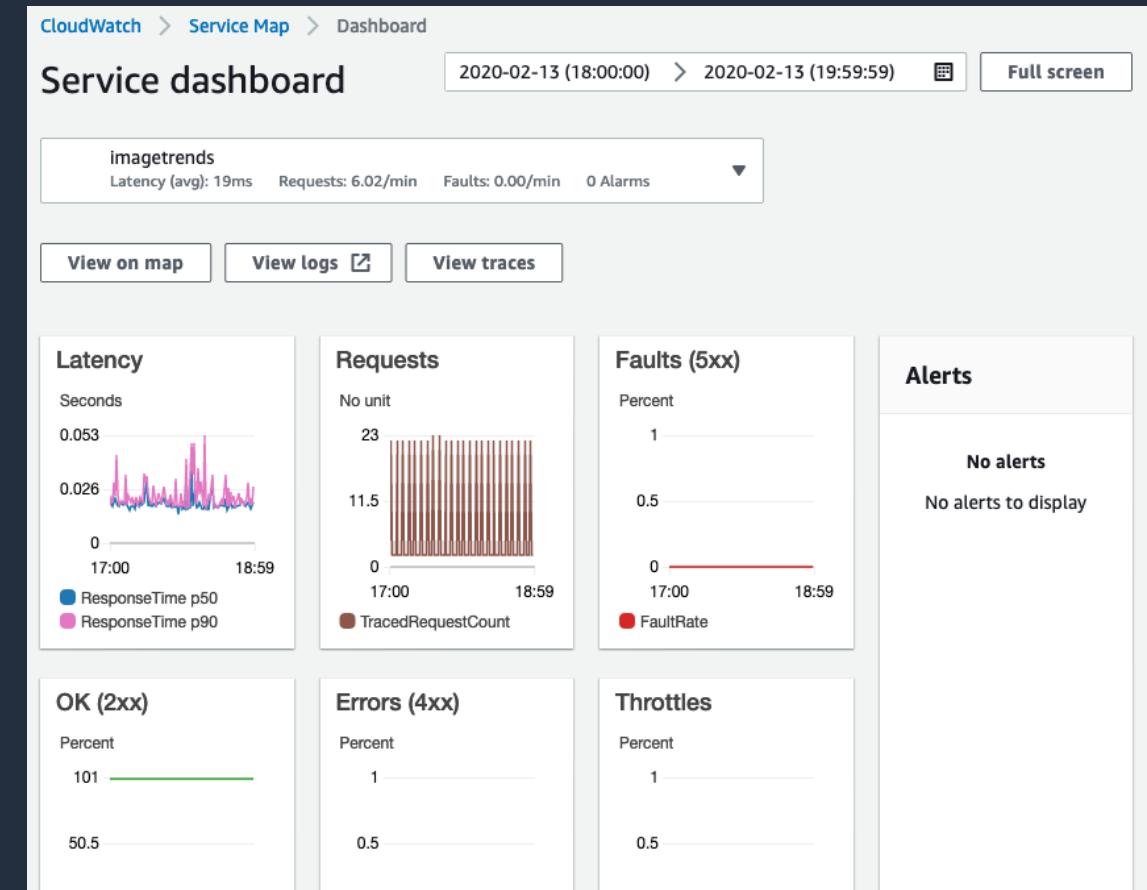
- Quickly isolate outliers, graph pattern and trends, drill into traces and filter by built-in keys and custom annotations to better understand performance issues impacting your application and end users.



CloudWatch ServiceLens

Visualize and analyze the health, performance, and availability of your applications in a single place.

- Integrates CloudWatch with AWS X-Ray to provide an end-to-end view of your application
- You can choose a node to see detailed insights about the correlated metrics, logs, and traces associated with that part of the service



Amazon VPC FlowLogs



Amazon VPC Flow Logs

Stores logs in AWS CloudWatch Logs

- Can be enabled on
 - Amazon VPC, a subnet, or a network interface
- Flow logs **do not capture real-time log streams for your network interfaces**
- Filter desired result based on need
 - All, Reject, Accept



Amazon VPC Flow Logs

- Agentless
- Logged to AWS CloudWatch Logs
- Create CloudWatch metrics from log data
- Alarm on those metrics

AWS account	Interface	Source IP	Source port	Protocol	Packets	Destination IP	Destination port	Bytes	Start/end time	Accept or reject
Event Data										
	2 41747	eni-b30b9cd5	119.147.115.32	10.1.1.179	6000	22	6	1	40	1442975475 1442975535 REJECT OK
	2 41747	eni-b30b9cd5	169.54.233.117	10.1.1.179	21188	80	6	1	40	1442975535 1442975595 REJECT OK
	2 41747	eni-b30b9cd5	212.7.209.6	10.1.1.179	3389	3389	6	1	40	1442975596 1442975655 REJECT OK
	2 41747	eni-b30b9cd5	189.134.227.225	10.1.1.179	39664	23	6	2	120	1442975656 1442975716 REJECT OK
	2 41747	eni-b30b9cd5	77.85.113.238	10.1.1.179	0	0	1	1	100	1442975656 1442975716 REJECT OK
	2 41747	eni-b30b9cd5	10.1.1.179	198.60.73.8	512	123	17	1	76	1442975776 1442975836 ACCEPT OK

Managed Open Source Tools for Observability



AWS Distro for OpenTelemetry

COLLECT DISTRIBUTED TRACES AND METRICS FOR APPLICATION MONITORING



- › Send metrics and traces to multiple AWS monitoring solutions
- › Speed up performance troubleshooting
- › Automatic trace collection
- › Collect metadata on application resources
- › Integrate with Amazon CloudWatch

Amazon Managed Grafana

SCALABLE, SECURE AND HIGHLY AVAILABLE DATA VISUALIZATION FOR YOUR OPERATIONAL METRICS



- › Analyze, monitor, and alarm across multiple data sources; native AWS as well as third-party
- › Access to Grafana Enterprise data source via AWS marketplace directly from the console
- › Automatic scaling
- › Native integration with multiple AWS Services

Amazon Managed Service for Prometheus

HIGHLY AVAILABLE, SECURE, AND MANAGED MONITORING



- › A serverless Prometheus-compatible monitoring service
- › Use the same open source Prometheus data model and query language
- › Fully managed, secure, and highly available using multi-AZ deployments
- › Improved scalability, availability, and security without having to manage the underlying infrastructure

Cost Monitoring



AWS Cost Explorer

- **CONSOLE-BASED COST AND USAGE REPORTING**



Filter/Group your data



Save your progress



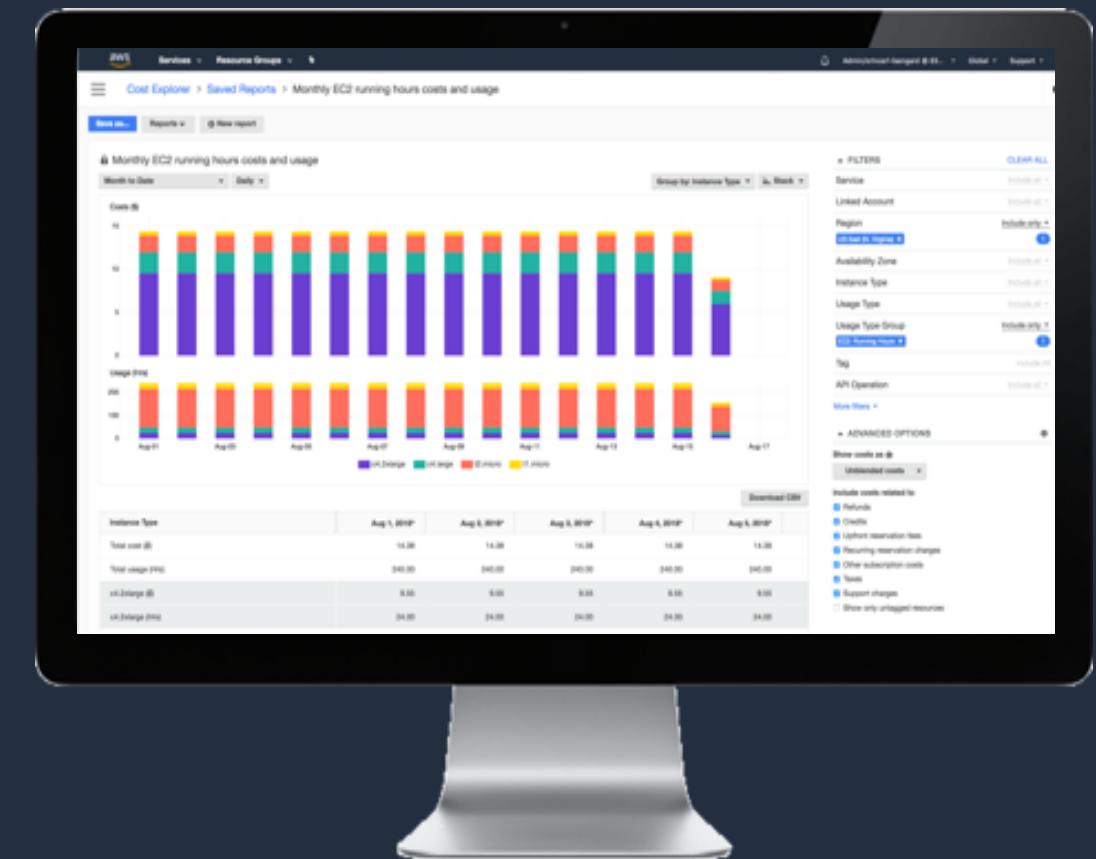
Set time interval and granularity



Forecast future costs and usage



Build custom applications

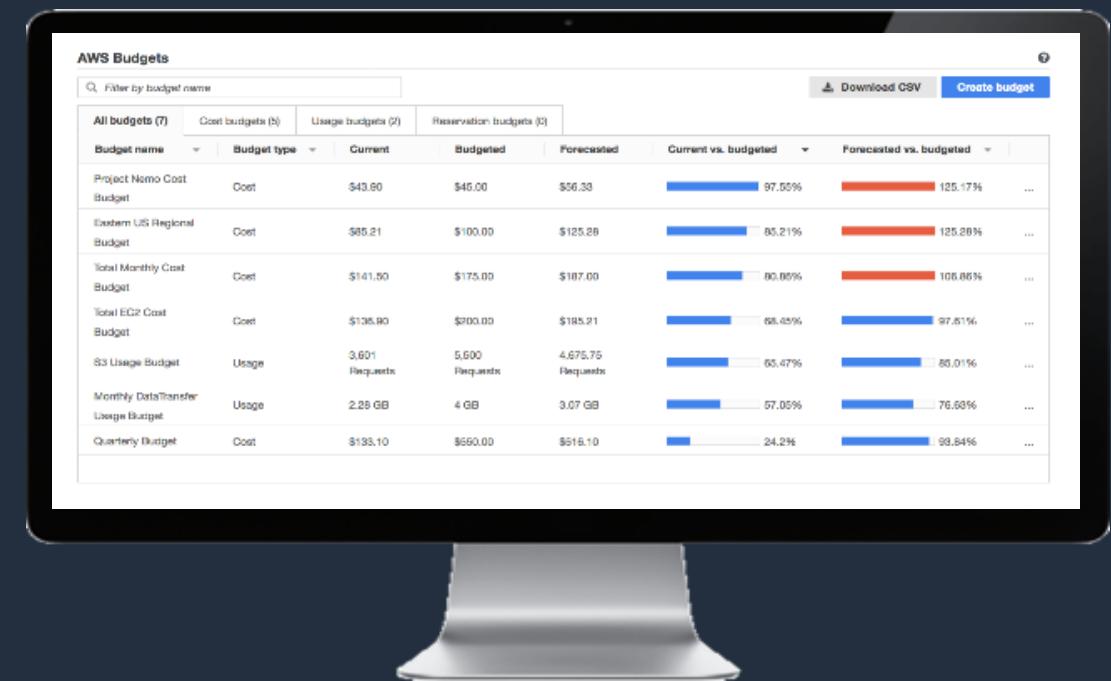


AWS Budgets

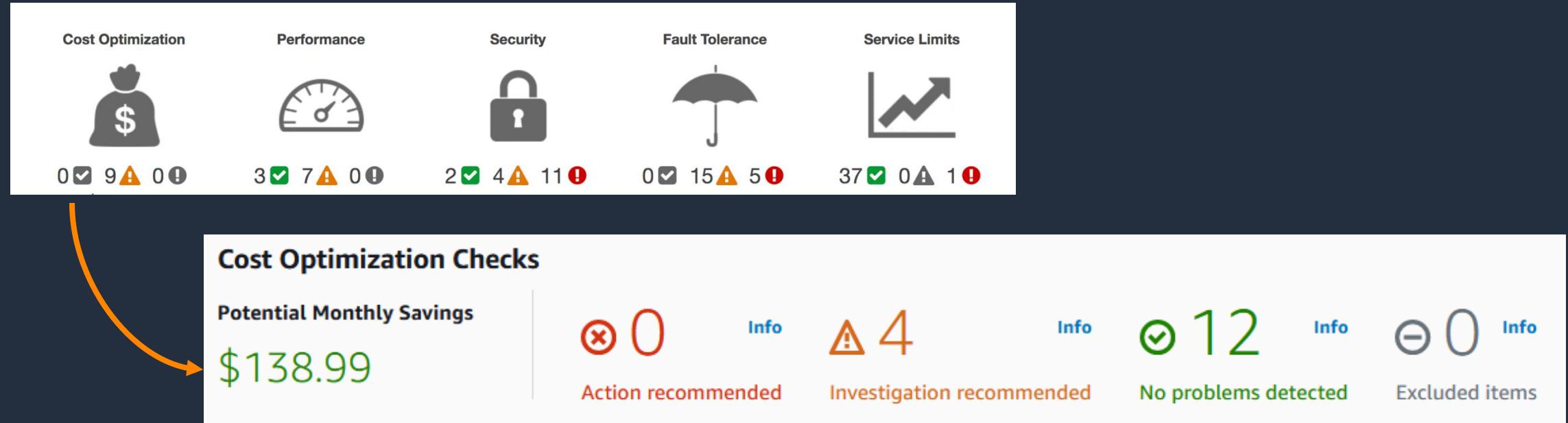
Get alerted when your cost or usage exceed (or are forecasted to exceed) your budget amount.

Benefits

- Customizable budgets
- Ongoing monitoring and alert notification
- Flexible Automation
- Set up AWS Budgets Reports on a cadence to stakeholders with no AWS access.



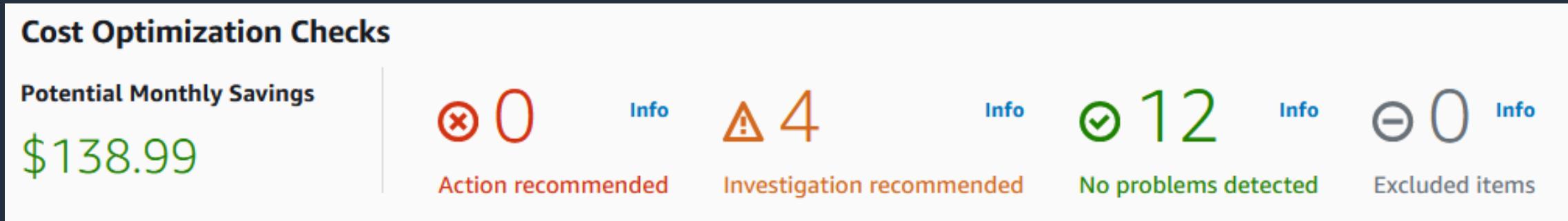
AWS Trusted Advisor



- A tool that provides guidance following AWS best practices
- All customers have access to Core checks
- Enterprise Support and Business Support customers have access to the full set of checks including Cost Optimization



AWS Trusted Advisor Cost Optimization Checks



- Underutilized resources
- Idle resources
- Savings Plans Recommendations





Thank you!

Michael Lin

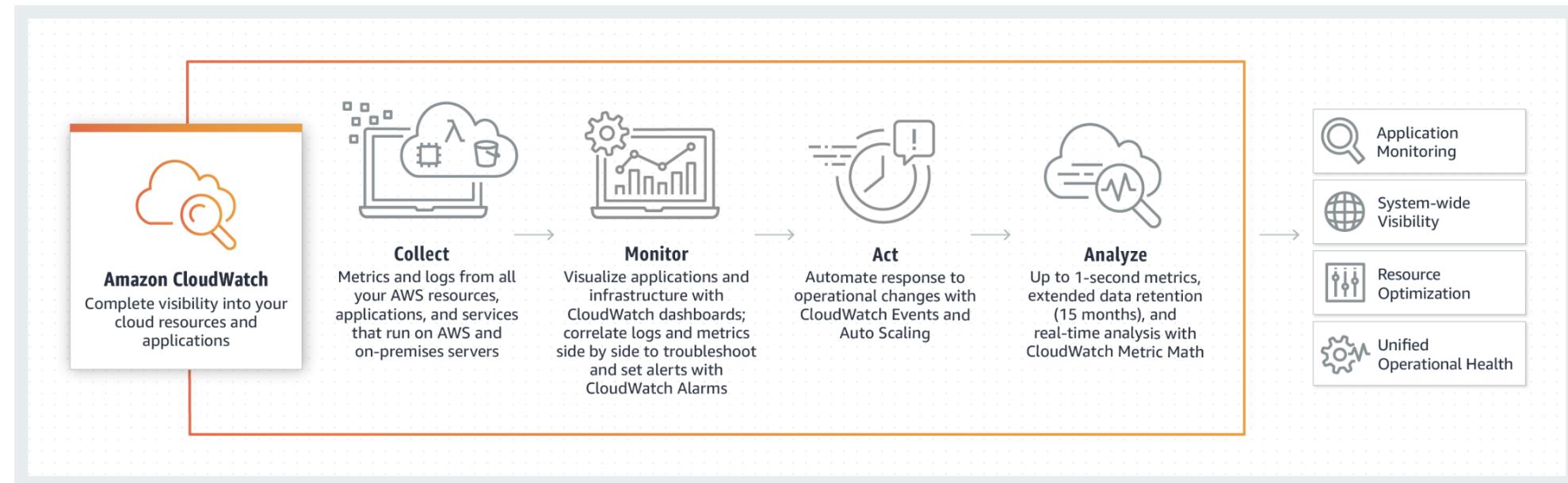
linmicht@amazon.com

<https://ppt.cc/fKOu7x>

AWS General Immersion Day



Monitoring - Amazon CloudWatch



Advanced General Immersion day

Content preferences

Language

English



Amazon CloudWatch is a monitoring and observability service built for DevOps engineers, developers, site reliability engineers (SREs), and IT managers. CloudWatch provides you with data and actionable insights to monitor your applications, respond to system-wide performance changes, optimize resource utilization, and get a unified view of operational health. CloudWatch collects monitoring and operational data in the form of logs, metrics, and events, providing you with a unified view of AWS resources, applications, and services that run on AWS and on-premises servers. You can use CloudWatch to detect anomalous behavior in your environments, set alarms, visualize logs and metrics side by side, take automated actions, troubleshoot issues, and discover insights to keep your applications running smoothly.

Use Cases

Console

Services (11)

Recent

Features (26)

Resources New

Documentation (11,316)

Knowledge Articles (232)

Marketplace (138)

Blogs (691)

Events (4)

Tutorials (10)

Search results for 'sns'

Services

See all 11 results ▶



Simple Notification Service ☆

SNS managed message topics for Pub/Sub



Amazon Pinpoint SMS

Scalable inbound and outbound text messaging



Route 53 Resolver

Resolve DNS queries in your Amazon VPC and on-premises network.



Route 53 ☆

Scalable DNS and Domain Name Registration

Features

See all 26 results ▶

Events

ElastiCache feature

Hosted zones

Route 53 feature

DNS Firewall

AWS VPC feature

Default layout

+ Add widgets

Create application

⋮

ns

< 1 >

on ▾ | Originating account

application.

⋮

S

⋮

S

Welcome



get the most out of AWS.



Services

Search

[Option+S]



N. Virginia

WSParticipantRole/Participant @ 5448-7167-4289

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

Application Integration

Amazon Simple Notification Service

Pub/sub messaging for microservices and serverless applications.

Amazon SNS is a highly available, durable, secure, fully managed pub/sub messaging service that enables you to decouple microservices, distributed systems, and event-driven serverless applications. Amazon SNS provides topics for high-throughput, push-based, many-to-many messaging.

Benefits and features

Reliably deliver messages with durability

Automatically scale your workload

Create topic

Topic name

A topic is a message channel. When you publish a message to a topic, it fans out the message to all subscribed endpoints.

[Next step](#)[Start with an overview](#)

Pricing

Amazon SNS has no upfront costs. You pay based on the number of messages you publish, the number of messages you deliver, and any additional API calls for managing topics and subscriptions. Delivery



Services

Search

[Option+S]



N. Virginia

WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS



New Feature

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Dashboard

Topics

Subscriptions

▼ Mobile

Push notifications

Text messaging (SMS)

Origination numbers

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general-id-20240720 x | General Immersion Day - Basic x Topics | Simple Notification S x +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/topics

Paused

aws Services Search [Option+S]

N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS

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Dashboard

Topics

Subscriptions

Mobile

Push notifications

Text messaging (SMS)

Origination numbers

Amazon SNS > Topics

Topics (0)

Edit Delete Publish message Create topic

Search

Name	Type	ARN
No topics		
To get started, create a topic.		
Create topic		

A red arrow points to the "Create topic" button in the top right corner of the main content area.

general id: 2024-07-20 X General Immersion Day - Bus X Create topic | Topics | Simple X

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-topic

Paused

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

New Feature

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

Amazon SNS > Topics > Create topic

Create topic

Details

Type [Info](#)

Topic type cannot be modified after topic is created

FIFO (first-in, first-out)

- Strictly-preserved message ordering
- Exactly-once message delivery
- High throughput, up to 300 publishes/second
- Subscription protocols: SQS

Standard

- Best-effort message ordering
- At-least once message delivery
- Highest throughput in publishes/second
- Subscription protocols: SQS, Lambda, HTTP, SMS, email, mobile application endpoints

Name

MyTopic .fifo

Maximum 256 characters. Can include alphanumeric characters, hyphens (-) and underscores (_). FIFO topic names must end with ".fifo".

Display name - optional [Info](#)

To use this topic with SMS subscriptions, enter a display name. Only the first 10 characters are displayed in an SMS message.

My Topic

Maximum 100 characters.



general-id-20240720 X | General Immersion Day - Basic X Create topic | Topics | Simple X +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-topic

Paused

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

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Amazon SNS > Topics > Create topic

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general-id-20240720 X | General Immersion Day - Bas X Create topic | Topics | Simple +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-topic

Paused

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

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Maximum 100 characters.



▶ Access policy - optional [Info](#)

This policy defines who can access your topic. By default, only the topic owner can publish or subscribe to the topic.

▶ Data protection policy - optional [Info](#)

This policy defines which sensitive data to monitor and to prevent from being exchanged via your topic.

▶ Delivery policy (HTTP/S) - optional [Info](#)

The policy defines how Amazon SNS retries failed deliveries to HTTP/S endpoints. To modify the default settings, expand this section.

▶ Delivery status logging - optional [Info](#)

These settings configure the logging of message delivery status to CloudWatch Logs.

▶ Tags - optional

A tag is a metadata label that you can assign to an Amazon SNS topic. Each tag consists of a key and an optional value. You can use tags to search and filter your topics and track your costs. [Learn more](#)

▶ Active tracing - optional [Info](#)

Use AWS X-Ray active tracing for this topic to view its traces and service map in Amazon CloudWatch. Additional costs apply.

Cancel

Create topic



general-id-20240720 X | General Immersion Day - Basic X JohnDoe-Topic | Topics | Simple X +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/topic/arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic

Paused

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS

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

Topic JohnDoe-Topic created successfully.
You can create subscriptions and send messages to them from this topic.

Publish message

Dashboard Topics Subscriptions

Mobile

Push notifications Text messaging (SMS) Origination numbers

JohnDoe-Topic

Edit Delete Publish message

Details

Name	Display name
JohnDoe-Topic	-
ARN	Topic owner
arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic	544871674289
Type	
Standard	

Subscriptions Access policy Data protection policy Delivery policy (HTTP/S) Delivery status logging Encryption

general-id-20240720 x | General Immersion Day - Basic x JohnDoe-Topic | Topics | Simple x +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/topic/arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic

Paused

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS

Dashboard Topics Subscriptions ▼ Mobile Push notifications Text messaging (SMS) Origination numbers

JohnDoe-Topic

Details

Name	Display name
JohnDoe-Topic	-
ARN	Topic owner
arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic	544871674289
Type	
Standard	

Subscriptions Access policy Data protection policy Delivery policy (HTTP/S) Delivery status logging Encryption >

Subscriptions (0)

Edit Delete Request confirmation Confirm subscription Create subscription

Search

ID	Endpoint	Status	Protocol
No subscriptions found			

You don't have any subscriptions to this topic.

Create subscription



general-id-20240720 X | General Immersion Day - Basic X Create subscription | Subscriptions X +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-subscription

Paused

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS > Subscriptions > Create subscription

Create subscription

Details

Topic ARN

arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic X

Protocol

The type of endpoint to subscribe

Select protocol ▼ ←

i After your subscription is created, you must confirm it. [Info](#)

► **Subscription filter policy - optional** [Info](#)

This policy filters the messages that a subscriber receives.

► **Redrive policy (dead-letter queue) - optional** [Info](#)

Send undeliverable messages to a dead-letter queue.

general-id-20240720 X | General Immersion Day - Basic X Create subscription | Subscriptions +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-subscription

Paused

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS > Subscriptions > Create subscription

Create subscription

Details

Topic ARN

arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic 

Protocol

The type of endpoint to subscribe

Email 

Amazon Kinesis Data Firehose

Amazon SQS

AWS Lambda

Email 

Email-JSON

HTTP

HTTPS

Platform application endpoint

SMS

general-id-20240720 X | General Immersion Day - Basic X Create subscription | Subscriptions X +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/create-subscription

Paused

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS > Subscriptions > Create subscription

Create subscription

Details

Topic ARN
arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic

Protocol
The type of endpoint to subscribe
Email

Endpoint
An email address that can receive notifications from Amazon SNS.
michael.tw.lin@gmail.com

After your subscription is created, you must confirm it. [Info](#)

► **Subscription filter policy - optional** [Info](#)
This policy filters the messages that a subscriber receives.

Create subscription

Details

Topic ARN

 arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic 

Protocol

The type of endpoint to subscribe

Endpoint

An email address that can receive notifications from Amazon SNS.

 After your subscription is created, you must confirm it. [Info](#)

► **Subscription filter policy - optional** [Info](#)

This policy filters the messages that a subscriber receives.

► **Redrive policy (dead-letter queue) - optional** [Info](#)

Send undeliverable messages to a dead-letter queue.

[Cancel](#)[Create subscription](#)

general-id-20240720 X | General Immersion Day - Basic X Subscription: 9473b894-e912-480b-9a33-91e9d3cba07f +

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/subscription/arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic:9473b894-e912-480b-9a33-91e9d3cba07f Paused

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS

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

Subscription to JohnDoe-Topic created successfully.
The ARN of the subscription is arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic:9473b894-e912-480b-9a33-91e9d3cba07f.

Dashboard Topics Subscriptions Mobile Push notifications Text messaging (SMS) Origination numbers

Amazon SNS > Topics > [JohnDoe-Topic](#) > Subscription: 9473b894-e912-480b-9a33-91e9d3cba07f

Subscription: 9473b894-e912-480b-9a33-91e9d3cba07f

[Edit](#) [Delete](#)

Details	
ARN	arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic:9473b894-e912-480b-9a33-91e9d3cba07f
Endpoint	michael.tw.lin@gmail.com
Topic	JohnDoe-Topic
Subscription Principal	arn:aws:iam::544871674289:role/WSParticipantRole
Status	Pending confirmation
Protocol	EMAIL

Compose



Primary

AWS Notifications

Starred Snoozed Important Sent Drafts Categories More

Promotions 50 new Amazon Web Services, 樂天Kob...

Social 1 new X Developer Platform

AWS Notification - Subscription Confirmation - You have chosen to subscribe to the topic: arn...



Inbox 4,388

Starred

Snoozed

Important

Sent

Drafts

Categories

More

Labels



Junk

Test

 Gmail

Search mail





 Compose

 Inbox 4,387

★ Starred

 Snoozed

» Important

sent

Drafts

© Springer 2010

Labels

+

← Repl

→ Forward



AWS Notification - Subscription Confirmation ➔ Inbox ×

AWS Notifications <no-reply@sns.amazonaws.com>

to me

4:01PM (0 minutes ago)

• • •

You have chosen to subscribe to the topic

arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic

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

[Confirm subscription](#)

Please do not reply directly to this email. If you wish to remove yourself from receiving all future SNS subscription confirmation requests please send an email to sns-opt-out





Simple Notification Service

Subscription confirmed!

You have successfully subscribed.

Your subscription's id is:

arn:aws:sns:us-east-1:544871674289:JohnDoe-Topic:9473b894-e912-480b-9a33-91e9d3cba07f

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

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/subscriptions

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS

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

Dashboard Topics Subscriptions Mobile Push notifications Text messaging (SMS) Origination numbers

Amazon SNS > Subscriptions

Subscriptions (1)

Edit Delete Request confirmation Confirm subscription Create subscription

Search < 1 > ⚙️

ID	Endpoint	Status	Protocol	Topic
9473b894-e912-480b...	michael.tw.lin@gmail....	Confirmed	EMAIL	JohnDoe-Topic

A red arrow points to the "Confirmed" status column for the first subscription row.



Services

ec2



N. Virginia ▾

WSParticipantRole/Participant @ 5448-7167-4289 ▾

Amazon SNS

Dashboard

Topics

Subscriptions

Mobile

Push notifications

Text messaging (SMS)

Origination numbers

Services (13)

Features (59)

Resources New

Documentation (30,453)

Knowledge Articles (617)

Marketplace (3,811)

Blogs (2,189)

Events (32)

Tutorials (19)

Search results for 'ec2'

Services

See all 13 results ▶



EC2 ☆

Virtual Servers in the Cloud



EC2 Image Builder ☆

A managed service to automate build, customize and deploy OS images



Recycle Bin

Protect resources from accidental deletion



Amazon Inspector ☆

Continual vulnerability management at scale

Features

See all 59 results ▶

Dashboard

EC2 feature

EC2 Instances

CloudWatch feature

AMIs

EC2 feature

tion

Create subscription

< 1 > | ⚙️

Topic

JohnDoe-Topic



Services

Search

[Option+S]



N. Virginia ▾

WSParticipantRole/Participant @ 5448-7167-4289 ▾



EC2 Dashboard

EC2 Global View

Events

Console-to-Code 

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Resources

EC2 Global View 

You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:

Instances (running)

0

Auto Scaling Groups

0

Dedicated Hosts

0

Elastic IPs

0

Instances

0

Key pairs

0

Load balancers

0

Placement groups

0

Security groups

1

Snapshots

0

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 US East (N. Virginia) Region

Service health

AWS Health Dashboard 

Region

US East (N. Virginia)

Status

 This service is operating normally.

Zones

Account attributes

Default VPC

vpc-80473bfd

Settings

Data protection and security

Zones

EC2 Serial Console

Default credit specification

EC2 console preferences

Explore AWS

Amazon GuardDuty Malware Protection

GuardDuty now provides agentless malware detection in Amazon EC2 & EC2 container workloads. [Learn more](#) 

Get Up to 40% Better Price Performance

T4g instances deliver the best price performance for burstable general purpose workloads in Amazon EC2. [Learn more](#) 

10 Things You Can Do Today to Reduce AWS Costs

Explore how to effectively manage your AWS



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 > Instances > Launch an instance

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name Add additional tags

Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

My AMIs Quick Start

Amazon macOS Ubuntu Windows Red Hat SUSE Li

Summary

Number of instances Info 1

Software Image (AMI)
Amazon Linux 2023.5.2...[read more](#)
ami-0b72821e2f351e396

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 > Instances > Launch an instance

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

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Search our full catalog including 1000s of application and OS images

My AMIs Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat SUSE Li

Summary

Number of instances Info 1

Software Image (AMI)
Amazon Linux 2023.5.2... read more
ami-0b72821e2f351e396

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Search our full catalog including 1000s of application and OS images

My AMIs

Quick Start

Amazon Linux



macOS



Ubuntu



Windows



Red Hat



SUSE Li



Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type

Free tier eligible

ami-01fccab91b456acc2 (64-bit (x86)) / ami-08293cd37d25b872d (64-bit (Arm))

Virtualization: hvm ENA enabled: true Root device type: ebs



Amazon Linux 2023 AMI

Free tier eligible

ami-0b72821e2f351e396 (64-bit (x86), uefi-preferred) / ami-07fa59ce6da2fe3fe (64-bit (Arm), uefi)

Virtualization: hvm ENA enabled: true Root device type: ebs

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type

Free tier eligible

ami-01fccab91b456acc2 (64-bit (x86)) / ami-08293cd37d25b872d (64-bit (Arm))

Virtualization: hvm ENA enabled: true Root device type: ebs

Deep Learning OSS Nvidia Driver AMI GPU PyTorch 2.3 (Amazon Linux 2)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type



Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and

ami-0e75c12341bfb93e8 (64-bit (x86))

Virtualization: hvm ENA enabled: true Root device type: ebs

Deep Learning OSS Nvidia Driver AMI GPU TensorFlow 2.16 (Amazon Linux 2)

ami-00482cb904068a5f6 (64-bit (x86))

Virtualization: hvm ENA enabled: true Root device type: ebs

Deep Learning Base OSS Nvidia Driver AMI (Amazon Linux 2)

ami-08f0d5468c82263f2 (64-bit (x86))

Cancel

Launch instance

Review commands



Services

Search

[Option+S]



N. Virginia ▾

WSParticipantRole/Participant @ 5448-7167-4289 ▾



Search our full catalog including 1000s of application and OS images

My AMIs

Quick Start

Amazon Linux



macOS



Ubuntu



Windows



Red Hat



SUSE Li



Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type

Free tier eligible

ami-01fccab91b456acc2 (64-bit (x86)) / ami-08293cd37d25b872d (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Amazon Linux 2 comes with five years support. It provides Linux kernel 5.10 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras. This AMI is the successor of the Amazon Linux AMI that is now under maintenance only mode and has been removed from this wizard.

Architecture

64-bit (x86)

AMI ID

ami-01fccab91b456acc2

Verified provider

Instance type [Info](#) | [Get advice](#)

▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI... [read more](#)
ami-01fccab91b456acc2

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB



Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and



Cancel

Launch instance

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.026 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

All generations Compare instance types

Additional costs apply for AMIs with pre-installed software

Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

Select Create new key pair

Network settings [Info](#) Edit

Network [Info](#)

vpc-80473bfd

Summary

Number of instances [Info](#) 1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...[read more](#)
ami-01fccab91b456acc2

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and



Services

Search

[Option+S]



N. Virginia ▾

WSParticipantRole/Participant @ 5162-8251-1392 ▾



EC2



▼ Network settings Info

Edit

Network Info

vpc-08ac79af8ac74673d

Subnet Info

No preference (Default subnet in any availability zone)

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

 Create security group Select existing security group

We'll create a new security group called 'launch-wizard-2' with the following rules:

Allow SSH traffic from Anywhere
Helps you connect to your instance

Anywhere
0.0.0.0/0

Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server

Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

▼ Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)
ami-0ae8f15ae66fe8cda

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

i **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 70 GiB of EBS storage, 2

Cancel

Launch instance

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5162-8251-1392

EC2 VPC RDS S3 Support Amazon SageMaker AWS DeepRacer CloudFormation

Network settings [Info](#)

Network [Info](#)
vpc-08ac79af8ac74673d

Subnet [Info](#)
No preference (Default subnet in any availability zone)

Auto-assign public IP [Info](#)
Enable
Additional charges apply when outside of free tier allowance

Firewall (security groups) [Info](#)
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group Select existing security group

We'll create a new security group called '**launch-wizard-2**' with the following rules:

Allow SSH traffic from
Helps you connect to your instance

Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server

Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

Summary

Number of instances [Info](#)
1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.5.2...[read more](#)
ami-0ae8f15ae66fe8cda

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 70 GiB of EBS storage, 2



⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.



Add security group rule

▼ Configure storage [Info](#)

Advanced

1x GiB Root volume (Not encrypted)

ⓘ Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage



Add new volume

ⓘ Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.



0 x File systems

Edit

► Advanced details 

▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...[read more](#)
ami-01fccab91b456acc2

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

ⓘ **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and



Cancel

Launch instance

Review commands

general-id-20240720 | General Immersion Day - Bas... | Launch an instance | EC2 | us | AWS Notification - Subscript... | Subscription confirm | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Advanced details Info

Domain join directory Info
Select ▼

IAM instance profile Info
Select ▼

Create new directory Create new directory

Hostname type Info
IP name ▼

Create new IAM profile Create new IAM profile

DNS Hostname Info

Enable IP name IPv4 (A record) DNS requests

Enable resource-based IPv4 (A record) DNS requests

Enable resource-based IPv6 (AAAA record) DNS requests

Instance auto-recovery Info
Select ▼

Shutdown behavior Info
Stop ▼

Stop - Hibernate behavior Info
Select ▼

Summary

Number of instances Info
1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI... read more
ami-01fccab91b456acc2

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

i **Free tier:** In your first year includes X
750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and

Cancel Launch instance



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances.

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

will break.

Metadata response hop limit | [Info](#)

2

Allow tags in metadata | [Info](#)

Select ▾

User data - *optional* | [Info](#)

Upload a file with your user data or enter it in the field.

 Choose file



User data has already been base64 encoded

▼ Summary

Number of instances | [Info](#)

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI... [read more](#)
ami-01fccab91b456acc2

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

 **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and



Cancel **Launch instance** Review commands

AWS General Immersion Day



► Before Starting the Workshop...

▼ Basic Modules

► Compute - Amazon EC2

► Network - Amazon VPC

► Security - AWS IAM

▼ Monitoring - Amazon CloudWatch

▼ Amazon CloudWatch Hands on Lab

Create SNS Topic

[Launch an EC2 Instance](#)

Configure a CloudWatch Alarm

Clean Up Resources

► Database - Amazon RDS

► Storage - Amazon S3 & EFS

► Provisioning - AWS CloudFormation

Advanced General Immersion day

▼ Content preferences

Language

English



7. Now we will add a script that will create a test stress script to simulate hits on your instance. The test script will run a workload generator tool **stress** designed to subject a system to a configurable measure of CPU. We configure **stress** to spawn 1 worker with a timeput of 300000000 microseconds or 5 mins for 30 minutes.

Expand the **Advanced Details** section at the bottom of the page, and type the following initialization script information into the **User Data** field (this will automatically install and start the stress tool):

```
#!/bin/sh  
yum -y update  
amazon-linux-extras install epel -y  
yum install stress -y  
stress -c 1 --backoff 300000000 -t 30m
```

User data - *optional* Info

Enter user data in the field.

```
#!/bin/sh  
  
yum -y update  
  
amazon-linux-extras install epel -y  
  
yum install stress -y  
  
stress -c 1 --backoff 300000000 -t 30m
```

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances.

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

will break.

Metadata response hop limit | [Info](#)

2

Allow tags in metadata | [Info](#)

Select ▾

User data - *optional* | [Info](#)

Upload a file with your user data or enter it in the field.

[Choose file](#)

```
#!/bin/sh
yum -y update
amazon-linux-extras install epel -y
yum install stress -y
stress -c 1 --backoff 300000000 -t 30m
```

User data has already been base64 encoded

▼ Summary

Number of instances | [Info](#)

1

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...[read more](#)
ami-01fccab91b456acc2

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

ⓘ Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and

Cancel [Launch instance](#) Review commands

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances.

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

will break.

Metadata response hop limit | Info 2

Allow tags in metadata | Info Select

User data - optional | Info
Upload a file with your user data or enter it in the field.
Choose file

```
#!/bin/sh
yum -y update
amazon-linux-extras install epel -y
yum install stress -y
stress -c 1 --backoff 300000000 -t 30m
```

User data has already been base64 encoded

▼ Summary

Number of instances | Info 1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...read more
ami-01fccab91b456acc2

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and

Cancel Launch instance Review commands



Subnet [Info](#)

No preference

Auto-assign public IP [Info](#)

Enable

Additional charges apply when outside of free tier allow

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic instance.

Create security group Se

Security group name - required

launch-wizard-1

This security group will be added to all network interfaces. The 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and _-:/

Description - required [Info](#)

launch-wizard-1 created 2024-07-20T08:03:53.000Z

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)

Type	Protocol	Source
ssh	TCP	Anywhere

When prompted, store the private key in a secure and accessible location on

Select an existing key pair or create a key pair [X](#)

We noticed that you didn't select a key pair. If you want to be able to connect to your instance it is recommended that you create one or select an existing one.

Create new key pair Proceed without key pair 

Key pair name
Key pairs allow you to connect to your instance securely.

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type
 RSA
RSA encrypted private and public key pair
 ED25519
ED25519 encrypted private and public key pair

Private key file format
 .pem
For use with OpenSSH
 .ppk
For use with PuTTY

 When prompted, store the private key in a secure and accessible location on

[Cancel](#) [Launch instance](#)

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Subnet Info

No preference

Create new subnet

Summary

Number of instances 1

Software Image (AMI)

Select an existing key pair or create a key pair

We noticed that you didn't select a key pair. If you want to be able to connect to your instance it is recommended that you create one or select an existing one.

Create new key pair Proceed without key pair

Cancel Launch instance

Inbound Security Group Rules

Security group rule 1 (TCP, 22, 0.0.0.0/0)

Type Info Protocol Info Port range Info

ssh TCP 22

Source type Info Source Info Description - optional Info

Anywhere Add CIDR, prefix list or security e.g. SSH for admin desktop

A red arrow points to the "Launch instance" button.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance ([i-0fb0863a6fdaf8f38](#))

▶ Launch log

Next Steps

What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 5 6 >

Create billing and free tier usage alerts
To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.

[Create billing alerts](#)

Connect to your instance
Once your instance is running, log into it from your local computer.

[Connect to instance](#)

[Learn more](#)

Connect an RDS database
Configure the connection between an EC2 instance and a database to allow traffic flow between them.

[Connect an RDS database](#)

[Create a new RDS database](#)

[Learn more](#)

Create EBS snapshot policy
Create a policy that automates the creation, retention, and deletion of EBS snapshots.

[Create EBS snapshot policy](#)

general-id-20240720 X | General Immersion Day - Basic X Instances | EC2 | us-east-1 X AWS Notification - Subscriptio X | Subscription confirm X | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard X

EC2 Global View

Events

Console-to-Code Preview

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Instances (1) Info

Find Instance by attribute or tag (case-sensitive)

All states

C Connect Instance state Actions Launch instances

Name Instance ID Instance state Instance type Status check Alarm status Availability Zone Public

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public
John Doe Server	i-0fb0863a6fdaf8f38	Running	t2.micro	Initializing	View alarms +	us-east-1a	ec2-1

Select an instance

≡

Red arrow pointing to the 'Preview' link under 'Console-to-Code'.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All states

Name Instance ID Instance state Instance type Status check

John Doe Server i-0fb0863a6fdaf8f38 Running t2.micro Initializing

Actions Connect Instance state Actions ▲ Launch instances Connect View details Manage instance state Instance settings Networking Security Image and templates Monitor and troubleshoot

Get system log Get instance screenshot Manage detailed monitoring Manage CloudWatch alarms Configure CloudWatch agent EC2 serial console Replace root volume Fleet Manager

i-0fb0863a6fdaf8f38 (John Doe Server)

Details Status and alarms Monitoring Security Networking Storage

Instance summary Public IPv4 address Private IPv4 addresses

Instance ID: i-0fb0863a6fdaf8f38 (John Doe Server) Public IPv4 address: 3.91.176.18 | open address Private IPv4 address: 172.31.86.137

IPv6 address: - Instance state: Running Public IPv4 DNS: ec2-3-91-176-18.compute-1.amazonaws.com | open address

Hostname type: Private IP DNS name (IPv4 only)

Red arrow points to the "Manage detailed monitoring" option in the Actions dropdown menu.

general-id-20240720 X | General Immersion Day - Basic X Instances | EC2 | us-east-1 X AWS Notification - Subscriptions X | Subscription confirm X | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Hostname type Private IP DNS name (IPv4 only) Public IPv4 DNS open address

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All states Name Instance ID Instance state Instance type Status check Alarm status Availability Zone Public

John Doe Server i-0fb0863a6fdaf8f38 Running t2.micro Initializing View alarms us-east-1a ec2-3-91-176-18.compute-1.amazonaws.com

Detailed monitoring After you enable detailed monitoring for an instance, monitoring data is available in 1-minute periods. [Learn more](#)

Instance ID i-0fb0863a6fdaf8f38 (John Doe Server)

Detailed monitoring Enable

After you enable detailed monitoring, the Amazon EC2 console displays monitoring graphs with a 1-minute period for the instance. [Additional charges apply](#)

Cancel Confirm

i-0fb0863a6fdaf8f38 (John Doe Server)

Details Status and alarms Mon

Instance summary Info Instance ID i-0fb0863a6fdaf8f38 (John Doe Server)

IPv6 address - Instance state Running

Public IPv4 DNS ec2-3-91-176-18.compute-1.amazonaws.com | open address

Red arrow pointing to the 'Enable' checkbox in the 'Detailed monitoring' dialog.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Hostname type Private IP DNS name (IPv4 only)

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All states Name Instance ID Instance state Instance type Status check Alarm status Availability Zone Public

John Doe Server i-0fb0863a6fdaf8f38 Running t2.micro Initializing View alarms us-east-1a ec2-137.131.241.137

Detailed monitoring

After you enable detailed monitoring for an instance, monitoring data is available in 1-minute periods. [Learn more](#)

Instance ID: [i-0fb0863a6fdaf8f38](#) (John Doe Server)

Detailed monitoring: Enable

After you enable detailed monitoring, the Amazon EC2 console displays monitoring graphs with a 1-minute period for the instance. [Additional charges apply](#)

Cancel Confirm

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All states Name Instance ID Instance state Instance type Status check Alarm status Availability Zone Public

John Doe Server i-0fb0863a6fdaf8f38 Running t2.micro Initializing View alarms us-east-1a ec2-3-91-176-18.compute-1.amazonaws.com

Detailed monitoring

After you enable detailed monitoring for an instance, monitoring data is available in 1-minute periods. [Learn more](#)

Instance ID: [i-0fb0863a6fdaf8f38](#) (John Doe Server)

Detailed monitoring: Enable

After you enable detailed monitoring, the Amazon EC2 console displays monitoring graphs with a 1-minute period for the instance. [Additional charges apply](#)

Cancel Confirm

37

Private IP DNS name (IPv4 only)

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

EC2 Dashboard Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Successfully enabled detailed monitoring for instance i-0fb0863a6fdaf8f38.

Instances (1/1) Info C Connect Instance state Actions Launch instances

Find Instance by attribute or tag (case-sensitive) All states

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publ
John Doe Server	i-0fb0863a6fdaf8f38	Running	t2.micro	Initializing	View alarms	us-east-1a	ec2-1

i-0fb0863a6fdaf8f38 (John Doe Server)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0fb0863a6fdaf8f38 (John Doe Server)	3.91.176.18 open address	172.31.86.137
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-3-91-176-18.compute-1.amazonaws.com open address
Hostname type	Private IP DNS name (IPv4 only)	

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances

- Instances**
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

Images

- AMIs
- AMI Catalog

Elastic Block Store

- Volumes
- Snapshots
- Lifecycle Manager

Network & Security

Search [Option+S] | [Actions ▲] | Launch instances

Successfully enabled detailed monitoring for instance i-0fb0863a6fdaf8f38.

Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive) All states

Name Instance ID Instance state Instance type Status check

John Doe Server	i-0fb0863a6fdaf8f38	Running	t2.micro	Initializing
-----------------	---------------------	---------	----------	--------------

i-0fb0863a6fdaf8f38 (John Doe Server)

Details Status and alarms Monitoring Security Networking Storage

Instance summary Info

Instance ID	i-0fb0863a6fdaf8f38 (John Doe Server)	Public IPv4 address	3.91.176.18 open address
IPv6 address	-	Instance state	Running
Hostname type		Private IP DNS name (IPv4 only)	172.31.86.137

Get system log
Get instance screenshot
Manage detailed monitoring
Manage CloudWatch alarms 
Configure CloudWatch agent
EC2 serial console
Replace root volume
Fleet Manager 

4 addresses

Public IPv4 DNS
ec2-3-91-176-18.compute-1.amazonaws.com | open address

Successfully enabled detailed monitoring for instance i-0fb0863a6fdaf8f38.

EC2 > Instances > i-0fb0863a6fdaf8f38 > Manage CloudWatch alarms

Manage CloudWatch alarms Info

Create or edit a CloudWatch alarm that monitors CloudWatch metrics for the instance.

Add or edit alarm Info

You can create a new alarm or edit an existing alarm.

Create an alarm
Create an alarm for i-0fb0863a6fdaf8f38

Edit an alarm
Edit an existing alarm for i-0fb0863a6fdaf8f38

Search for alarm
Find an alarm to modify
 Select an existing alarm to edit

Alarm notification Info

Configure the alarm to send notifications to an Amazon SNS topic when it is triggered.

Choose an existing topic or enter a name to create a new topic

Alarm action Info

Specify the actions to take when the alarm is triggered.

Successfully enabled detailed monitoring for instance i-0fb0863a6fdaf8f38.

EC2 > Instances > i-0fb0863a6fdaf8f38 > Manage CloudWatch alarms

Manage CloudWatch alarms Info

Create or edit a CloudWatch alarm that monitors CloudWatch metrics for the instance.

Add or edit alarm Info

You can create a new alarm or edit an existing alarm.

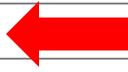
Create an alarm
Create an alarm for i-0fb0863a6fdaf8f38

Edit an alarm
Edit an existing alarm for i-0fb0863a6fdaf8f38

Search for alarm
Find an alarm to modify
 Select an existing alarm to edit

Alarm notification Info

Configure the alarm to send notifications to an Amazon SNS topic when it is triggered.

JohnDoe-Topic 

Alarm action Info

Specify the actions to take when the alarm triggers.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ManageCloudWatchAlarms:instanceId=i-0fb0863a6fdaf8f38

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Alarm action Info

Specify the action to take when the alarm is triggered.

Alarm thresholds

Specify the metric thresholds for the alarm.

Group samples by: Average

Type of data to sample: CPU utilization

Alarm when: \geq 60 

Consecutive period: 1

Period: 5 Minutes

Alarm name: awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization

Alarm description: Alarm on instance i-0fb0863a6fdaf8f38: Triggered when CPUUtilization ≥ 0.6 for 1 consecutive 5-minute periods.

Sample metric data Info

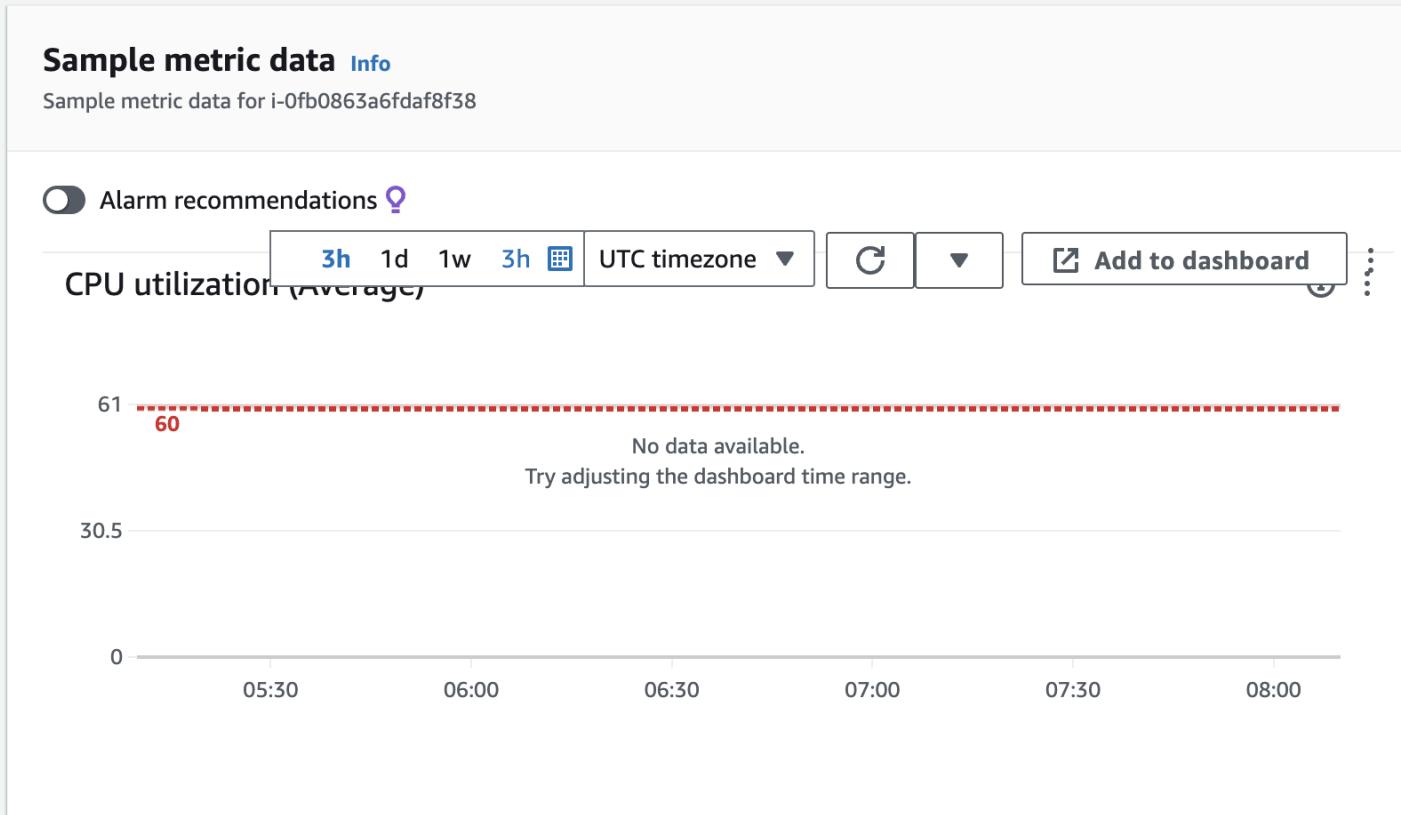
Sample metric data for i-0fb0863a6fdaf8f38

5 Minutes

Alarm name

Alarm description

Alarm on instance i-0fb0863a6fdaf8f38: Triggered when CPUUtilization >= 60 for 1 consecutive 5-minute periods.



Cancel

Create



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard X

Created CloudWatch alarm: awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization

Instances (1/1) Info C Connect Instance state Actions Launch instances ▾

Find Instance by attribute or tag (case-sensitive) All states ▾ < 1 > ⚙

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
John Doe Server	i-0fb0863a6fdaf8f38	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1a

i-0fb0863a6fdaf8f38 (John Doe Server) ⚙ X

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0fb0863a6fdaf8f38 (John Doe Server)	3.91.176.18 open address ↗	172.31.86.137
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-3-91-176-18.compute-1.amazonaws.com open address ↗
Hostname type	Private IP DNS name (IPv4 only)	



Services

Q cloudwatch



N. Virginia ▾

WSParticipantRole/Participant @ 5448-7167-4289 ▾

- EC2 Dashboard
- EC2 Global View
- Events
- Console-to-Code Prev
- ▼ Instances
 - Instances
 - Instance Types
 - Launch Templates
 - Spot Requests
 - Savings Plans
 - Reserved Instances
 - Dedicated Hosts
 - Capacity Reservations
- ▼ Images
 - AMIs
 - AMI Catalog
- ▼ Elastic Block Store
 - Volumes
 - Snapshots
 - Lifecycle Manager
- ▼ Network & Security
 - Security Groups
 - Elastic IP addresses



Services (3)

Features (42)

Resources New

Documentation (11,530)

Knowledge Articles (181)

Marketplace (1,822)

Blogs (615)

Events (4)

Search results for 'cloudwatch'

Services

**CloudWatch** ☆

Monitor Resources and Applications

Top features

[Logs](#) [Metrics](#) [Alarms](#) [Dashboards](#) [Services](#)**Athena** ☆

Serverless interactive analytics service

**Amazon EventBridge** ☆

Serverless service for building event-driven applications.

Features

[See all 42 results ▶](#)

CloudWatch dashboard

Systems Manager feature

Create a SFTP server

AWS Transfer Family feature

Data sources

Athena feature

4 addresses

1.86.137

4 DNS

91-176-18.compute-1.amazonaws.com |

Address ↗

Answer private resource DNS name

Instance type

Elastic IP addresses

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#home:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Overview info

3h 1d UTC timezone ▾ Actions ▾

Favorites and recents

Dashboards

Alarms 0 0 1

Logs

Metrics

X-Ray traces

Events

Application Signals New

Network monitoring

Insights

Settings

Getting Started

What's new

CloudWatch

Overview

Overview Filter by resource group

info

Alarms by AWS service

Services In alarm 0 Insufficient data 1 OK 0

EC2 (1)

Recent alarms

View recent alarms dashboard

awsec2-i-0fb0863a6fdaf8f3. ...

No unit

61

60 CPUUtilization >= 60 for 1 d...

59

05:15 08:10

CPUUtilization

Default Dashboard

Name any CloudWatch dashboard **CloudWatch-Default** to display it here. [Create a new default dashboard](#)

Application Insights

Get started with Application Insights info

Configure Application Insights

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms ▾ 0 ⓘ 0 ⓘ 1 In alarm All alarms Billing Logs Metrics X-Ray traces Events Application Signals New Network monitoring Insights

CloudWatch > Alarms

Alarms (1)

Hide Auto Scaling alarms Clear selection Actions

<input type="checkbox"/>	Name	State	Last state update (UTC)	Conditions	Actions
<input type="checkbox"/>	awsec2-i- Ofb0863a6fdfaf8f38- GreaterThanOrEqualTo ToThreshold- CPUUtilization	Insufficient data	2024-07-20 08:14:59	CPUUtilization >= 60 for 1 datapoints within 5 minutes	

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms ▾ 0 OK 1 ⚡ 0 In alarm All alarms Billing Logs Metrics X-Ray traces Events Application Signals New Network monitoring Insights

CloudWatch > Alarms

Alarms (1)

Hide Auto Scaling alarms Clear selection Create composite alarm Actions

<input type="checkbox"/>	Name	State	Last state update (UTC)	Conditions	Actions
<input type="checkbox"/>	awsec2-i- Ofb0863a6fdfaf8f38- GreaterThanOrEqualTo ToThreshold- CPUUtilization	<input checked="" type="checkbox"/> OK	2024-07-20 08:16:53	CPUUtilization >= 60 for 1 datapoints within 5 minutes	<input checked="" type="checkbox"/> Actions e

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~()

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms In alarm All alarms Billing Logs Metrics All metrics Explorer Streams X-Ray traces Events Application Signals New Network monitoring Insights Settings

CloudWatch > Metrics

Untitled graph 1h 3h 12h 1d 3d 1w Custom UTC timezone Actions Line C ▾

Your CloudWatch graph is empty.
Select some metrics to appear here.

Browse Multi source query Graphed metrics Options Source Add math Add query

Metrics (283) Info Alarm recommendations Download alarm code Create alarm Graph with SQL Graph search N. Virginia Search for any metric, dimension, resource id or account id

EBS	9	EC2	38	Events	1	Logs	6
• View automatic dashboard		• View automatic dashboard		• View automatic dashboard		• View automatic dashboard	
SNS	2	States	8	Usage	219		
• View automatic dashboard		• View automatic dashboard		• View automatic dashboard			

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~()&namespace=~'AWS*2fEC2

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards

Alarms 0 1 0

- In alarm
- All alarms
- Billing

Logs

Metrics

All metrics

Explorer

Streams

X-Ray traces

Events

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Settings

CloudWatch > Metrics

Untitled graph 1h 3h 12h 1d 3d 1w Custom UTC timezone Actions Line C ▾

Your CloudWatch graph is empty.
Select some metrics to appear here.

1
0.5
0

05:30 05:45 06:00 06:15 06:30 06:45 07:00 07:15 07:30 07:45 08:00 08:15

Browse Multi source query Graphed metrics Options Source Add math Add query

Metrics (38) Info Alarm recommendations Download alarm code (2) Create alarm Graph with SQL Graph search

N. Virginia All > EC2 Search for any metric, dimension, resource id or account id

By Image (AMI) Id 7 Per-Instance Metrics 17 Aggregated by Instance Type 7 Across All Instances 7

A red arrow points to the "Per-Instance Metrics" button.

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~()&query=~'*7bAWS*2fEC2*2cInstanceId*7d

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards

Alarms 0 1 0

- In alarm
- All alarms
- Billing

Logs

Metrics

All metrics

Explorer

Streams

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Settings

CloudWatch > Metrics

Untitled graph

1h 3h 12h 1d 3d 1w Custom UTC timezone Actions Line C ▾

Your CloudWatch graph is empty.
Select some metrics to appear here.

05:30 05:45 06:00 06:15 06:30 06:45 07:00 07:15 07:30 07:45 08:00 08:15

Browse Multi source query Graphed metrics Options Source Add math Add query

Metrics (17) Info Alarm recommendations Download alarm code (2) Create alarm Graph with SQL Graph search

N. Virginia All > EC2 > Per-Instance Metrics Search for any metric, dimension, resource id or account id

Instance name	InstanceId	Metric name	Alarms
John Doe Server	i-0fb0863a6fdfaf8f38	MetadataNoToken	No alarms
John Doe Server	i-0fb0863a6fdfaf8f38	NetworkPacketsIn	No alarms
John Doe Server	i-0fb0863a6fdfaf8f38	NetworkPacketsOut	No alarms
John Doe Server	i-0fb0863a6fdfaf8f38	CPUSurplusCreditBalance	No alarms
John Doe Server	i-0fb0863a6fdfaf8f38	CPUCreditUsage	No alarms

CloudWatch X

Favorites and recents ▶

Dashboards

Alarms ⚠ 0 ✓ 1 🕒 0

- In alarm
- All alarms
- Billing

Logs

Metrics

All metrics

- Explorer
- Streams

X-Ray traces

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What's new

CloudWatch > Metrics

Untitled graph ✍

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

Actions ▼ Line ▼ C ▼

Your CloudWatch graph is empty.
Select some metrics to appear here.

Browse Multi source query Graphed metrics (1) Options Source Add math Add query

N. Virginia ▼ All > EC2 > By Image (AMI) Id 🔍 Search for any metric, dimension, resource id or account id < 1 > ⚙️

-	ImageId 7/7	▲ Metric name	▼ Alarms
<input type="checkbox"/>	ami-01fccab91b456acc2	NetworkIn ⓘ	No alarms
<input type="checkbox"/>	ami-01fccab91b456acc2	DiskWriteOps ⓘ	No alarms
<input type="checkbox"/>	ami-01fccab91b456acc2	DiskReadBytes ⓘ	No alarms
<input type="checkbox"/>	ami-01fccab91b456acc2	DiskReadOps ⓘ	No alarms
<input type="checkbox"/>	ami-01fccab91b456acc2	DiskWriteBytes ⓘ	No alarms
<input type="checkbox"/>	ami-01fccab91b456acc2	NetworkOut ⓘ	No alarms
<input checked="" type="checkbox"/>	ami-01fccab91b456acc2	CPUUtilization ⓘ	No alarms

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~(view~'timeSeries~stacked~false~metrics~(~(~'AWS*2fEC2~'CPU...)

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents

Dashboards

Alarms 0 1 0

- In alarm
- All alarms
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CloudWatch Metrics

Untitled graph edit

1h 3h 12h 1d 3d 1w Custom UTC timezone Actions Line C ▾

Percent

0.334

0.167

0

05:15 05:30 05:45 06:00 06:15 06:30 06:45 07:00 07:15 07:30 07:45 08:00 08:15

CPUUtilization

Browse Multi source query Graphed metrics (1) Options Source Add math Add query

Add dynamic label Info Statistic: Average Period: 5 minutes Clear graph

Label	Details	Statistic	Period	Y axis	Actions
<input checked="" type="checkbox"/> CPUUtilization edit	EC2 • CPUUtilization • InstanceId: i-0fb08 edit Average	Average	5 minutes	< >	More Bell Copy

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~(metrics~(~(~'AWS*2fEC2~'CPUUtilization~'InstanceId~'i-0fb086...)

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms 0 ✓ 1 0

In alarm All alarms Billing

Logs Metrics

All metrics Explorer Streams

X-Ray traces Events Application Signals New Network monitoring Insights Settings

CloudWatch Metrics

Untitled graph

1h 3h 12h 1d 3d 1w Custom UTC timezone Actions Line C ▾

Percent

99.2

49.7

0.161

05:30 05:45 06:00 06:15 06:30 06:45 07:00 07:15 07:30 08:00 08:15

CPUUtilization

1 second 5 seconds 10 seconds 30 seconds 1 minute ✓ 5 minutes 15 minutes 1 hour 6 hours 1 day 7 days 30 days

Add query Clear graph

Graphed metrics (1) Options Source

Add dynamic label Info Statistic: Average Pe

Label	Details	Statistic	Pe
CPUUtilization	EC2 • CPUUtilization • InstanceId: i-0fb08	Average	1 minute

Y axis Actions

Percent

99.2

49.7

0.161

05:30 05:45 06:00 06:15 06:30 06:45 07:00 07:15 07:30 08:00 08:15

CPUUtilization

1 second 5 seconds 10 seconds 30 seconds 1 minute ✓ 5 minutes 15 minutes 1 hour 6 hours 1 day 7 days 30 days

Add query Clear graph

Graphed metrics (1) Options Source

Add dynamic label Info Statistic: Average Pe

Label	Details	Statistic	Pe
CPUUtilization	EC2 • CPUUtilization • InstanceId: i-0fb08	Average	1 minute

Y axis Actions

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~(metrics~(~(~'AWS*2fEC2~'CPUUtilization~'InstanceId~'i-0fb086...)

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms 0 1 0 Logs Metrics All metrics Explorer Streams X-Ray traces Events Application Signals New Network monitoring Insights Settings

CloudWatch > Metrics

Untitled graph 1h 3h 12h 1d 3d 1w Custom Actions Line C ▾

Absolute Relative

Minutes	1	3	5	15	30	45
Hours	1	2	3	6	8	12
Days	1	2	3	4	5	6
Weeks	1	2	4	6		
Months	3	6	12	15		

Duration Unit of time: 3 Hours Up to 4 digits.

statistic: Average Period: 1 minute Clear graph

Statistic: Average Period: 1 minute Y axis Actions

08 Average 1 minute < > ^ ^

Clear Cancel Apply

The screenshot shows the AWS CloudWatch Metrics interface. A red arrow points to the 'Custom' button in the top navigation bar. A modal dialog is open, allowing the user to select a specific time range. The 'Relative' tab is selected. The dialog includes a grid of time intervals: Minutes (1, 3, 5, 15, 30, 45), Hours (1, 2, 3, 6, 8, 12), Days (1, 2, 3, 4, 5, 6), Weeks (1, 2, 4, 6), Months (3, 6, 12, 15), Duration (3 hours selected), and Unit of time (Hours). At the bottom of the dialog are 'Clear', 'Cancel', and 'Apply' buttons, with 'Apply' being highlighted by a red arrow.

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~(metrics~(~(~'AWS*2fEC2~'CPUUtilization~'InstanceId~'i-0fb086...)

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards

Alarms 0 1 0

- In alarm
- All alarms
- Billing

Logs

Metrics

All metrics

- Explorer
- Streams

X-Ray traces

Events

Application Signals New

Network monitoring

Insights

CloudWatch > Metrics

Untitled graph

1h 3h 12h 1d 3d 1w Custom (30m) UTC timezone Actions Line C ▾

Absolute Relative

Minutes: 1, 3, 5, 15, 30, 45 (30 is selected, highlighted with a red arrow)

Hours: 1, 2, 3, 6, 8, 12

Days: 1, 2, 3, 4, 5, 6

Weeks: 1, 2, 4, 6

Months: 3, 6, 12, 15

Duration: 30 Minutes (Up to 4 digits.)

Unit of time: Minutes

Statistic: Average Period: 1 minute Clear graph

08 Average 1 minute < > ⌂ ⌃ ⌁ ⌂ ⌃ ⌁

The screenshot shows the AWS CloudWatch Metrics interface. On the left, there's a sidebar with various navigation links like Alarms, Logs, Metrics, and Network monitoring. The main area is titled 'Untitled graph' and shows a line chart of CPU utilization over time. Above the chart, there are several time range buttons: 1h, 3h, 12h, 1d, 3d, 1w, and 'Custom (30m)' which is currently selected. Below these buttons is a 'UTC timezone' dropdown. To the right of the time range are 'Actions' and 'Line' buttons, along with icons for copy and download. A search bar at the top has the placeholder '[Option+S]'. The main content area has a large 'Relative' button and a 'Duration' input field set to '30 Minutes'. There are also dropdowns for 'Unit of time' (set to 'Minutes') and 'Statistic' (set to 'Average'). At the bottom of the duration input field, it says 'Up to 4 digits.' and there are 'Clear', 'Cancel', and 'Apply' buttons.

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch Untitled graph 1h 3h 12h 1d 3d 1w Custom (30m) UTC timezone Actions Line C ▾

Favorites and recents Dashboards

Alarms 0 1 0 In alarm All alarms Billing

Logs

Metrics All metrics Explorer Streams

X-Ray traces CPUUtilization EC2 • CPUUtilization • InstanceId: i-0fb08 Average 1 minute < > ⌂ ⌃ ⌁ ⌂

Events Application Signals New Network monitoring Insights Settings

CloudWatch Metrics

Untitled graph

Percent

99.2
49.7
0.161

07:50 07:55 08:00 08:05 08:10 08:15

Browse Multi source query Graphed metrics (1) Options Source Add math Add query

Add dynamic label Info Statistic: Average Period: 1 minute Clear graph

Label	Details	Statistic	Period	Y axis	Actions
CPUUtilization	EC2 • CPUUtilization • InstanceId: i-0fb08	Average	1 minute	< >	⌂ ⌃ ⌁ ⌂

wait for 5 minutes



us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#metricsV2?graph=~(metrics~(~(~'AWS*2fEC2~'CPUUtilization~'InstanceId~'i-0fb086...)

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards

Alarms ⚠ 1 ←

- In alarm
- All alarms
- Billing

Logs

Metrics

All metrics

- Explorer
- Streams

X-Ray traces

Events

Application Signals New

Network monitoring

Insights

CloudWatch > Metrics

Untitled graph ✍

1h 3h 12h 1d 3d 1w Custom (30m) UTC timezone Actions Line C ▾

Percent

07:55 08:00 08:05 08:10 08:15 08:20

Browse Multi source query Graphed metrics (1) Options Source Add math Add query

Add dynamic label Info Statistic: Average Period: 1 minute Clear graph

Label	Details	Statistic	Period	Y axis	Actions
CPUUtilization ✍	EC2 • CPUUtilization • InstanceId: i-0fb08 ✍ Average	Average	1 minute	< >	✍ ⚠ ↻

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms ⚠ 1 ✓ 0 ⋯ 0

In alarm All alarms Billing Logs Metrics X-Ray traces Events Application Signals New Network monitoring Insights Settings

CloudWatch > Alarms

Alarms (1)

Hide Auto Scaling alarms

<input type="checkbox"/>	Name	State	Last state update (UTC)	Conditions	Actions
<input type="checkbox"/>	awsec2-i- Ofb0863a6fdfaf8f38- GreaterThanOrEqualTo ToThreshold- CPUUtilization	⚠ In alarm	2024-07-20 08:20:53	CPUUtilization >= 60 for 1 datapoints within 5 minutes	<input checked="" type="checkbox"/> Actions

Compose

 Inbox 4,387

Starred

Snoozed

Important

Sent

Drafts

Categories

More

Labels

+

Junk

Test

□ ⏪ ⏴ ⏵

Primary

Promotions 50 new
Amazon Web Services, 樂天Kob...Social 1 new
X Developer Platform

⋮ □ ★ ⌂ AWS Notifications

ALARM: "awsec2-i-Ofb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUti..." in US East (N...

⋮ 

≡  Gmail

 Search mail



 Compose

 Inbox 4,387

☆ Starred

 Snoozed

» Important

Cont.

1

Labels

junk

Test

ALARM: "awsec2-i-Ofb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUti..." in US East (N. Virginia)            <img alt="Amazon CloudWatch Metrics

AWS Notifications <no-reply@sns.amazonaws.com>

4:20 PM (1 minute ago)

to me

You are receiving this email because your Amazon CloudWatch Alarm "awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization" in the US East (N. Virginia) region has entered the ALARM state, because "Threshold Crossed: 1 datapoint [71.46559139784947 (20/07/24 08:15:00)] was greater than or equal to the threshold (60.0)." at "Saturday 20 July, 2024 08:20:53 UTC".

[View this alarm in the AWS Management Console](#)

<https://us-east-1.console.aws.amazon.com/cloudwatch/deeplink.js?region=us-east-1#alarmsV2:alarm/awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization>

Alarm Details

- Name: awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization
- Description: Alarm on instance i-0fb0863a6fdaf8f38: Triggered when CPUUtilization >= 60 for 1 consecutive 5-minute periods.
- State Change: OK -> ALARM
- Reason for State Change: Threshold Crossed: 1 datapoint [71.46559139784947 (20/07/24 08:15:00)] was greater than or equal to the threshold (60.0).
- Timestamp: Saturday 20 July, 2024 08:20:53 UTC
- AWS Account: 544871674289
- Alarm Arn: arn:aws:cloudwatch:us-east-1:544871674289:alarm:awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization

Threshold

- The alarm is in the ALARM state when the metric is GreaterThanOrEqualToThreshold 60.0 for at least 1 of the last 1 period(s) of 300 seconds

Monitored Metrics

- MetricNamespace: AWS/EC2
 - MetricName: CPUUtilization
 - Dimensions: [InstanceId = i-0fb0863a6fdaf8f38]

general-id-20240720 Metrics | CloudWatch | us-eas General Immersion Day - Bas Alarms | CloudWatch | us-eas +

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:~(selectedIds~(~'awsec2-i-0fb0863a6fdfaf8f38-GreaterThanOrEqualToThr... ☆ T :)

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms ▾ 0 1 0

In alarm All alarms Billing Logs Metrics

All metrics Explorer Streams

X-Ray traces Events Application Signals New Network monitoring Insights Settings

CloudWatch > Alarms

Alarms (1/1) Hide Auto Scaling alarms Clear selection Create composite alarm Actions ▾ Create alarm

Search Alarm state: Any Alarm type: Any Actions status: Any

<input checked="" type="checkbox"/>	Name	State	Last state update (UTC)	Conditions	Action
<input checked="" type="checkbox"/>	awsec2-i- 0fb0863a6fdfaf8f38- GreaterThanOrEqual ToThreshold- CPUUtilization	OK	2024-07-20 08:44:53	CPUUtilization >= 60 fo minutes	Delete Edit Copy

Delete Add to dashboard Manage tags Actions e Alarm actions - new

A red arrow points to the "Delete" button in the context menu.

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:~(selectedIds~(~awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThr...)

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards Alarms ⚠ 0 ✓ 1 ... 0

In alarm All alarms Billing Logs Metrics All metrics Explorer Streams X-Ray traces Events Application Signals New Network monitoring Insights Settings

CloudWatch > Alarms

Alarms (1/1)

Hide Auto Scaling alarms Clear selection Create composite alarm Actions Create alarm

Name	State	Last state update (UTC)	Conditions	Actions
awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization	OK	2024-07-20 08:44:53	CPUUtilization >= 60 for 1 datapoints within 5 minutes	Actions

Delete awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization?

Delete awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization permanently? This action cannot be undone.

Cancel Delete



us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents Dashboards

Alarms ⚠ 0 ✓ 1 ... 0

In alarm All alarms Billing

Logs

Metrics All metrics Explorer Streams

X-Ray traces

Events

Application Signals New

Network monitoring

Insights

Settings

Success
The alarm awsec2-i-0fb0863a6fdaf8f38-GreaterThanOrEqualToThreshold-CPUUtilization was successfully deleted.

CloudWatch > Alarms

Alarms (0) Hide Auto Scaling alarms Clear selection  Actions 

Search Alarm state: Any Alarm type: Any Actions status: Any

Name	State	Last state update (UTC)	Conditions	Actions
No alarms				
No alarms to display				
Read more about Alarms				
				

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

aws Services Q ec2 X

N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

CloudWatch

Favorites and recents

Dashboards

Alarms 0 1

In alarm

All alarms

Billing

Logs

Metrics

All metrics

Explorer

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X-Ray traces

Events

Application Signals

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Settings

Search results for 'ec2'

Services See all 13 results ▶

EC2 ☆ Virtual Servers in the Cloud

Top features Dashboard Launch templates Instances Spot Instance requests Savings plans

EC2 Image Builder ☆ A managed service to automate build, customize and deploy OS images

Recycle Bin Protect resources from accidental deletion

Amazon Inspector ☆ Continual vulnerability management at scale

Features See all 59 results ▶

Dashboard EC2 feature

EC2 Instances

Actions Create alarm Any 1 Actions

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Home:

aws Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard

EC2 Global View

Events

Console-to-Code [Preview](#)

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Resources

You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:

Instances (running)	1
Dedicated Hosts	0
Instances	1
Load balancers	0
Security groups	2
Volumes	1
Auto Scaling Groups	0
Elastic IPs	0
Key pairs	0
Placement groups	0
Snapshots	0

Launch instance

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

Service health

AWS Health Dashboard

Region: US East (N. Virginia)

Status: ✓ This service is operating normally.

Zones

Account attributes

Default VPC

vpc-80473bfd

Settings

Data protection and security

Zones

EC2 Serial Console

Default credit specification

EC2 console preferences

Explore AWS

Save up to 90% on EC2 with Spot Instances

Optimize price-performance by combining EC2 purchase options in a single EC2 ASG. [Learn more](#)

Enable Best Price-Performance with AWS Graviton2

AWS Graviton2 powered EC2 instances enable up to 40% better price performance for a broad spectrum of cloud workloads. [Learn more](#)

Get Up to 40% Better Price Performance

T4g instances deliver the best price

The screenshot shows the AWS EC2 Dashboard. On the left sidebar, there are several navigation sections: EC2 Global View, Events, Console-to-Code (with a 'Preview' link), Instances (with sub-options like Instances, Instance Types, etc.), Images (with AMIs and AMI Catalog), Elastic Block Store (with Volumes, Snapshots, and Lifecycle Manager), and Network & Security (with Security Groups). The main content area has a title 'Resources' and a message stating 'You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:'. Below this is a table listing various resources with their counts: Instances (running) 1, Dedicated Hosts 0, Instances 1, Load balancers 0, Security groups 2, Volumes 1, Auto Scaling Groups 0, Elastic IPs 0, Key pairs 0, Placement groups 0, and Snapshots 0. A red arrow points to the 'Instances (running)' row. Below the table is a 'Launch instance' section with a large orange 'Launch instance' button and a 'Migrate a server' link. At the bottom of this section is a note: 'Note: Your instances will launch in the US East (N. Virginia) Region'. To the right of this is a 'Service health' section showing the AWS Health Dashboard, the region (US East (N. Virginia)), and a status message: 'This service is operating normally.' with a green checkmark. The top of the page includes a search bar, a keyboard shortcut for saving ([Option+S]), and account information for 'N. Virginia' and 'WSParticipantRole/Participant @ 5448-7167-4289'. On the far right, there are three small icons: a gear, a bell, and a question mark. The top right corner also has a star icon, a copy icon, and a settings icon.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances

- Instances**
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

Images

- AMIs
- AMI Catalog

Elastic Block Store

- Volumes
- Snapshots
- Lifecycle Manager

Network & Security

Instances (1) Info

Find Instance by attribute or tag (case-sensitive) All states

Instance state = running Clear filters

<input type="checkbox"/>	Name <small>edit</small>	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public
<input type="checkbox"/>	John Doe Server	i-0fb0863a6fdaf8f38	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1a	ec2-1

Select instance: John Doe Server

Select an instance

general-id-20240720 Metrics | CloudWatch | us-east-1 General Immersion Day - Bas Instances | EC2 | us-east-1 +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All states Instance state = running Clear filters Instance state Instance type Status check Alarm status Availability Zone Public

John Doe Server i-0fb0863a6fdaf8f38 Running t2.micro 2/2 checks passed View alarms us-east-1a ec2-3-91-176-18.compute-1.amazonaws.com

i-0fb0863a6fdaf8f38 (John Doe Server)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary Instance ID i-0fb0863a6fdaf8f38 (John Doe Server) Public IPv4 address 3.91.176.18 | open address Instance state Running Private IPv4 addresses 172.31.86.137 Public IPv4 DNS ec2-3-91-176-18.compute-1.amazonaws.com | open address

IPv6 address - Hostname type Private IP DNS name (IPv4 only)

Launch instances

general-id-20240720 Metrics | CloudWatch | us-east-1 General Immersion Day - Bas Instances | EC2 | us-east-1 +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All Instance state = running X Clear filters Instance state Instance type Name John Doe Server Instance ID i-0fb0863a6fdaf8f38 Instance state Running Instance type t2.micro Actions Launch instances Stop instance Start instance Reboot instance Hibernate instance Alarm status Availability Zone Public 1 John Doe Server i-0fb0863a6fdaf8f38 (John Doe Server) Details Status and alarms Monitoring Security Networking Storage Tags Instance summary Instance ID i-0fb0863a6fdaf8f38 (John Doe Server) IPv6 address - Hostname type Public IPv4 address 3.91.176.18 | open address Instance state Running Private IP DNS name (IPv4 only) Private IPv4 addresses 172.31.86.137 Public IPv4 DNS ec2-3-91-176-18.compute-1.amazonaws.com | open address

Terminate instance

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Hostname type Private IP DNS name (IPv4 only)

Instances (1/1) Info Find Instance by attribute or tag (case-sensitive) All states Instance state = running Clear filters Instance ID Instance state Instance type Status check Alarm status Availability Zone Public John Doe Server i-0fb0863a6fdfaf8f38 Running t2.micro 2/2 checks passed View alarms us-east-1a ec2-1a

Terminate instance?

On an EBS-backed instance, the default action is for the root EBS volume to be deleted when the instance is terminated. Storage on any local drives will be lost.

Are you sure you want to terminate these instances?

Instance ID	Termination protection
i-0fb0863a6fdfaf8f38 (John Doe Server)	Disabled

To confirm that you want to terminate the instances, choose the terminate button below. Instances with termination protection enabled will not be terminated. Terminating the instance cannot be undone.

Cancel Terminate

Red arrow pointing to the 'Terminate' button in the confirmation dialog.

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running;v=3;\$case=tags:true%5C,client:false;\$regex=tags:false%5C...

EC2 Dashboard Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

Successfully initiated termination of i-0fb0863a6fdfaf8f38

Instances (1/1) Info Instances (1/1) Find Instance by attribute or tag (case-sensitive) All states Instance state Actions Launch instances

Instance state = running Clear filters < 1 > Instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
John Doe Server	i-0fb0863a6fdfaf8f38	Shutting-down	t2.micro	2/2 checks passed	View alarms	us-east-1a

i-0fb0863a6fdfaf8f38 (John Doe Server)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0fb0863a6fdfaf8f38 (John Doe Server)	3.91.176.18 open address	172.31.86.137
IPv6 address	Instance state	Public IPv4 DNS
-	Shutting-down	ec2-3-91-176-18.compute-1.amazonaws.com open address
Hostname type	Private IP DNS name (IPv4 only)	

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running;v=3;\$case=tags:true%5Cclient:false;\$regex=tags:false%5C...

AWS Services Search [Option+S] N. Virginia WSParticipantRole/Participant @ 5448-7167-4289

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances

- Instances**
- Instance Types
- Launch Templates
- Spot Requests
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- Capacity Reservations

Images

- AMIs
- AMI Catalog

Elastic Block Store

- Volumes
- Snapshots
- Lifecycle Manager

Network & Security

Instances Info

Find Instance by attribute or tag (case-sensitive)

Instance state = running All states

Name Instance ID Instance state Instance type Status check Alarm status Availability Zone

No matching instances found

Select an instance



Services

Search

[Option+S]



N. Virginia ▾

WSParticipantRole/Participant @ 5448-7167-4289 ▾



New Feature

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

Application Integration

Amazon Simple Notification Service

Pub/sub messaging for microservices and serverless applications.

Amazon SNS is a highly available, durable, secure, fully managed pub/sub messaging service that enables you to decouple microservices, distributed systems, and event-driven serverless applications. Amazon SNS provides topics for high-throughput, push-based, many-to-many messaging.

Benefits and features

Reliably deliver messages with durability

Automatically scale your workload

Create topic

Topic name

A topic is a message channel. When you publish a message to a topic, it fans out the message to all subscribed endpoints.

[Next step](#)[Start with an overview](#)

Pricing

Amazon SNS has no upfront costs. You pay based on the number of messages you publish, the number of messages you deliver, and any additional API calls for managing topics and subscriptions. Delivery



Services

Search [Option+S]



N. Virginia

WSParticipantRole/Participant @ 5448-7167-4289

Amazon SNS



Dashboard

Topics

Subscriptions

Mobile

Push notifications

Text messaging (SMS)

Origination numbers



New Feature

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A topic is a message channel. When you publish a message to a topic, it fans out the message to all subscribed endpoints.

Next step

[Start with an overview](#)

Pricing

Amazon SNS has no upfront costs. You pay based on the number of messages you publish, the number of messages you deliver, and any additional API calls for managing topics and subscriptions. Delivery pricing varies by endpoint.

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/topics

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Amazon SNS X

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

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Amazon SNS > Topics

Topics (1)

Edit Delete Publish message Create topic

Search

< 1 > ⚙️

Name	Type	ARN
JohnDoe-Topic	Standard	arn:aws:sns:us-east-1:544871674289:John...



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Topics (1)

Edit Delete Publish message Create topic

Search < 1 > 🔍

Name	Type	ARN
JohnDoe-Topic	Standard	arn:aws:sns:us-east-1:544871674289:John...



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Topics (1)

Search

Name

John

Edit

Delete

Publish message

Create topic

< 1 >



ARN

arn:aws:sns:us-east-1:544871674289:John...

Delete topic JohnDoe-Topic X

Are you sure you want to delete topic **JohnDoe-Topic** permanently? **You can't undo this action.**

To confirm deletion, enter the phrase **delete me**.

delete me

Cancel

Delete

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Topics (1)

Edit Delete Publish message Create topic

Search

Name John Doe Topic

ARN arn:aws:sns:us-east-1:544871674289:John...

Delete topic JohnDoe-Topic

Are you sure you want to delete topic **JohnDoe-Topic** permanently? **You can't undo this action.**

To confirm deletion, enter the phrase **delete me**.

delete me 

Cancel Delete

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#/topics

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Topics (1)

Edit Delete Publish message Create topic

Search

Name	ARN
JohnDoe-Topic	arn:aws:sns:us-east-1:544871674289:John...

Delete topic JohnDoe-Topic

Are you sure you want to delete topic **JohnDoe-Topic** permanently? **You can't undo this action.**

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Amazon SNS

New Feature
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Topic JohnDoe-Topic deleted successfully.

Amazon SNS > Topics

Topics (0)

Edit Delete Publish message Create topic

Search

Name	Type	ARN
No topics		

To get started, create a topic.

Create topic

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Thank you!

Michael Lin

linmicht@amazon.com

