

Use case

Auto Stop running Instances during the night

Use case Description

Schedule Lambda every evening and stop running Ec2 instances to reduce billing

Approach :

1. Create SNS topic and Subscribe to it
2. Create Lambda function to list and iterate through EC2 instances and check for running instances, stop if any running instances found and send report
3. Create an event bridge scheduler that runs every day at 10.00pm and invokes Lambda

The screenshot shows the AWS Lambda console for the function 'Lambda-StopRunningInstances'. The function overview shows it has no layers and no destinations. The code source tab is active, displaying the following Python code:

```
1 import boto3
2 import os
3
4 SNS_TOPIC_ARN = "arn:aws:sns:ap-south-1:770424767712:SNS-Send-Report"
5 sns = boto3.client('sns')
6
7 def lambda_handler(event, context):
```

The screenshot also shows the Amazon SNS console for the topic 'SNS-Send-Report'. The topic details show it is a Standard type topic owned by 770424767712. The subscriptions tab shows one subscription with ID 'a2f25744-0ffe-429d-8c9a-24d97437c8f8', endpoint 'dkarasu@evoketechnologies.com', status 'Confirmed', and protocol 'EMAIL'.

Amazon EventBridge

Schedules

Stop-Running-Instances-Dialy

Dashboard

Developer resources

Buses

Pipes

Scheduler

Integration

Schema registry

Documentation

Stop-Running-Instances-Dialy

Disable

Edit

Delete

Schedule detail

Schedule name

Stop-Running-Instances-Dialy

Description

Schedule group name

default

Status

Enabled

Schedule ARN

arn:aws:scheduler:ap-south-1:770424767712:schedule/default/Stop-Running-Instances-Dialy

Action after completion

NONE

Schedule start time

-

Schedule end time

-

Execution time zone

Asia/Calcutta

Flexible time window

-

Created date

Jul 16, 2025, 19:08:35 (UTC+05:30)

Last modified date

Jul 16, 2025, 19:08:35 (UTC+05:30)

Schedule

Target

Retry policy

Dead-letter queue

Encryption

Schedule

Cron expression

0 22 * * ? *

Next 10 trigger dates

Wed, 16 Jul 2025 22:00:00 (UTC+05:30)

Cron expression

Was this content helpful?

Learn more

Lambda

Functions

Lambda-StopRunningInstances

Code

Test

Monitor

Configuration

Aliases

Versions

Executing function: succeeded

Details

Summary

Code SHA-256

HAPq9EReJVEc5gLavtc/gyd5vZtd9eiUFG932nt0BxY=

Function version

\$LATEST

Duration

18555.12 ms

Resources configured

128 MB

Init duration

437.02 ms

Log output

The area below shows the last 4 KB of the execution log. Click here to view the corresponding CloudWatch log group.

Execution time

4 minutes ago

Request ID

5c371dc0-0f42-4df6-9d2b-db3c70a8bd3b

Billed duration

18556 ms

Max memory used

104 MB

CloudWatch

Log groups

/aws/lambda/Lambda-StopRunningInstances

2025/07/16/[LATEST]896633bu0cd04812bc91790bbea48d6e

CloudWatch

Log events

Actions

Start tailing

Create metric filter

Log events

You can use the filter bar below to search for and match terms, phrases, or values in your log events. Learn more about filter patterns

Filter events - press enter to search

Clear

1m

30m

1h

12h

Custom

UTC timezone

Display

Timestamp

Message

No older events at this moment. Retry

2025-07-16T13:55:48.882Z

INIT_START Runtime Version: python:3.12.v79 Runtime Version ARN: arn:aws:lambda:ap-south-1:runtime:aa140c0e9a9c41d993c36eaf7681396a27ec935d7665a4368d08a10a0f7e

2025-07-16T13:55:49.323Z

START RequestId: 5c371dc0-0f42-4df6-9d2b-db3c70a8bd3b Version: \$LATEST

2025-07-16T13:56:07.719Z

No running instances found to stop.

No running instances found to stop.

2025-07-16T13:56:07.879Z

END RequestId: 5c371dc0-0f42-4df6-9d2b-db3c70a8bd3b

2025-07-16T13:56:07.879Z

REPORT RequestId: 5c371dc0-0f42-4df6-9d2b-db3c70a8bd3b Duration: 18555.12 ms Billed Duration: 18556 ms Memory Size: 128 MB Max Memory Used: 104 MB Init Duration: 437.02 ms

No newer events at this moment. Auto retry paused. Resume

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

To: Dinesh Karasu Wed 7/16/2025 7:26 PM

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No running instances found to stop.

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Reply Forward

EC2 Instances Stopped by Scheduled Lambda

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

To: Dinesh Karasu

Wed 7/16/2025 7:32 PM

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The following EC2 instances were stopped to reduce cost:

i-0a64b2704956644e9 (Region: ap-south-1)

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