Analyzing Performance of EBS Volumes with CloudWatch

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Overview

Notifying *Globomantics* administrator each time a new snapshot is created

Amazon CloudWatch Events for Amazon EBS
- What is AWS CloudWatch?
- EBS Volume Events
- EBS Snapshot Events

Using Amazon Lambda to handle CloudWatch Events
- Send email on new EBS snapshot

Demo: Email the administrator after EBS snapshot is created

Summary

Amazon CloudWatch Events for EBS Volumes

What Is AWS CloudWatch?

CloudWatch can monitors resources and applications on Amazon AWS in real time

Use CloudWatch to collect and track metrics for these resources and applications.

Amazon CloudWatch "Events", deliver a near real-time stream of events that describe changes in AWS resources. Events are in JSON.

You can create "Rules" to trigger programmatic actions in response to CloudWatch events.

Amazon EBS sends CloudWatch notifications for a variety of volume and snapshot events. You can establish rules that trigger programmatic actions in response to these CloudWatch events.

"EBS Volume" Events

Create Volume (createVolume)

Is sent when an action to create an EBS volume completes (*available* or *failed*)

Delete Volume (deleteVolume)

Is sent when an action to delete a volume completes (*deleted* or never sent)

Volume Attach or Reattach (attachVolume, reattachVolume)

Is sent if a volume fails to attach or reattach to an instance

"EBS Snapshot" Events

Create Snapshot (createSnapshot)

Is sent when an action to create a snapshot completes (*succeeded* or *failed*)

Copy Snapshot (copySnapshot)

Is sent when an action to copy a snapshot completes (*succeeded* or *failed*)

Share Snapshot (shareSnapshot)

Is sent when another account shares a snapshot with it (always *succeeded*)

Using Amazon Lambda to Handle CloudWatch Events

AWS Lambda

AWS Lambda is a compute service that lets you run code without provisioning or managing servers
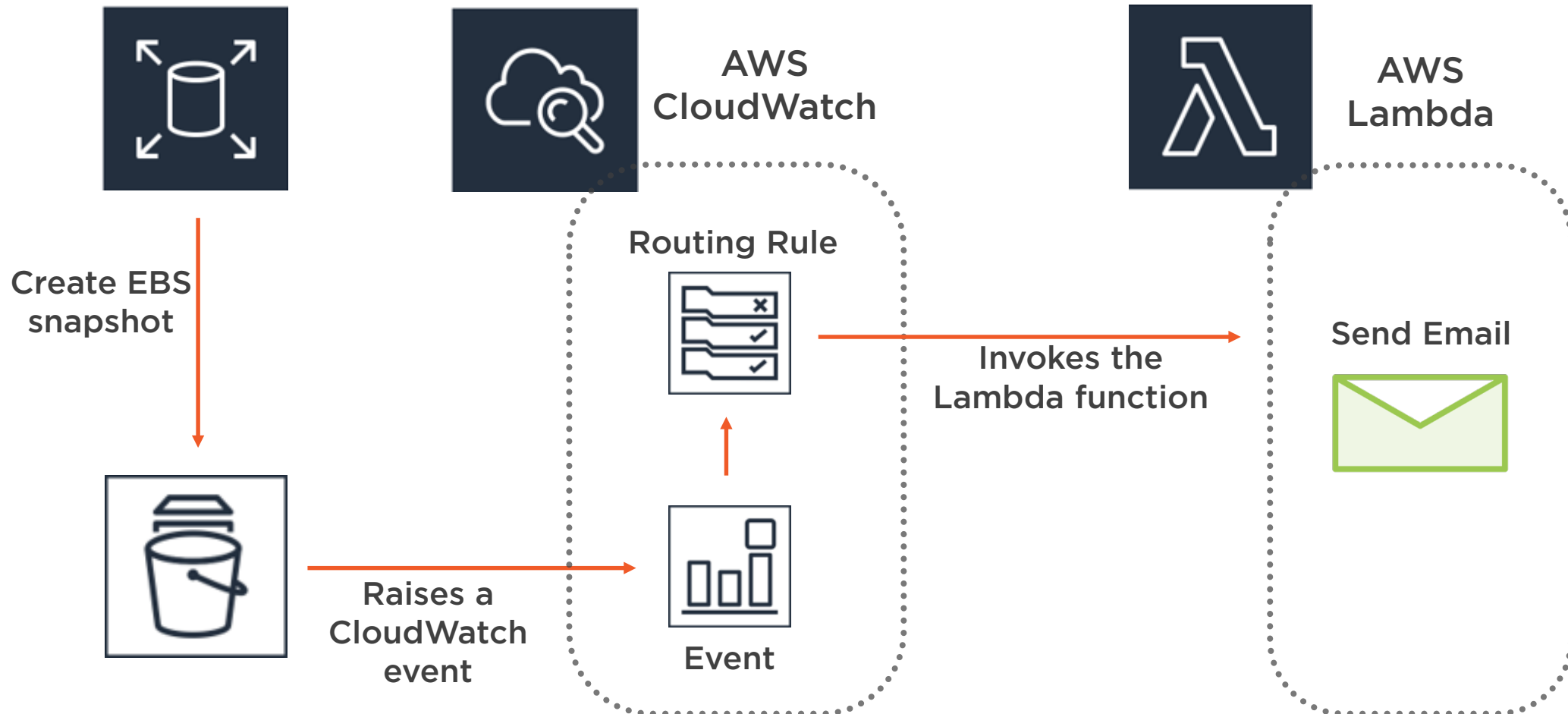
You can use AWS Lambda to run your code in response to events, such as an EBS snapshot being created

You can also build "serverless" applications composed of functions

Using Amazon Lambda to Handle CloudWatch Events

AWS CloudWatch

AWS Lambda

Routing Rule

Create EBS snapshot

Raises a CloudWatch event

Event

Invokes the Lambda function

Send Email

Demo

Send an email notification to the *Globomantics* administrator each time a new EBS snapshot is created

Summary

Notifying *Globomantics* administrator each time a new snapshot is created

Amazon CloudWatch Events for Amazon EBS

- What is CloudWatch?

- EBS Volume & Snapshot Events

Using Amazon Lambda to send email after new EBS snapshot is created

- Introduction to AWS Lambda

Demo: Send email after EBS snapshot creation

Course summary