Lambda:

It follows both push and pull model

Push: Another service trigger lambda and tells to activate when something happens

pull: Information is flowing through stream or put in a queue that lamda perodically calls and goes into action when certain events are detected

Amazon S3 is an example of which Event Source type?

push and synchronous.

lambda cost is calculated on

1. number of request

2. Gigabits second(Amount of time each request runs \* Amount of resources)

The Lambda function handler is the method that processes events. When function is invoked, Lambda runs the handler method.

Event object of the function handler allows the event source to share information with the code?

ways to configure lambda: aw sui, aws cli, cloudformation, Sdk’s , SAM

How can we increase the concurrency limit of a lambda function?

Open a quota increase case in the service quota dashboard.

default lambda metrics in aws cloud watch?

* Number of request with errors
* number of request
* Invocation duration per request.

How many lambda function can run con currently? 1000

How lambda can communicate with the services inside the private network?

First option Run lambda inside of your own private vPC right next to Db or servers. Drawback is that we have moved Lambda to our VPC and now we have to take care of High availability. Lambda will no longer have access to internet and now we have to use Nat gateway to connect to internet. Lambda will no longer able to communicate with the other aws services that are running outside your VPC.

Second option We can let our lambda run in AWS lambda service VPS and by making use of interface endpoint we can connect it with our VPC. An interface VPC endpoint allows you to privately connect your Amazon VPC to AWS Lambda services VPC.

Steps for 2 option.

go to endpoints >> endpoint name>>service category>>service (lambda) >>select the VPC with which you want to connect the endpoint >>select subnet>>security groups>>IAM policy >>create endpoint

Concurrency: it is the number of lambda function that can run simultaneously

Unreserved account concurrency

Python:

1. fetching info from api /talking to apis

2. scripts to automate infra on aws

3. checking node health

**Python**

in python OS is a module that talks to the operating system. In os module there is a function listdir. This will print all the files in the directory. It is similar to shell command ls.

python uses request module to comminucate with github

get pull request info on a git hub repo using pyhton

(python uses request module to communicate with github)

1 use request module

2 Need to know the url which is used to access the api related to github pull request.

3. once info is received convert the json data into the dicionary

4. Print the pull request info.

**boto3**:

it is used to create resource in Aws through python

**Lambda function for devops.**

we make use of lambda resources for cost optimization by checking any of the stale resources in our account either to delete them or notify.

Let suppose there is any EBD volume created but is not in use from last 30 days so either we can delete them or notify the owner.

We govern the usage of all the reosurces in aws account using Lmabda function

We have tell the cloudwatch by configuring the cronjob to trigger a lambda function at 10:00am everyday and run some specific jobs

Lambda can alos be used for security compliance like we have certain resources that can not be created by any users so if any such specific resource is created, we have a lambda function run every day that will trigger the notification

ddb

**Cost optimization project:**

cost optimization by deleting the stale resources

We’ll use lambda function and in this we’jj write a python code. We’ll make use of module named boto 3.

We have created a lambda function to delete the snapshots which are not attached to any volume, before that we check the time when the snapshot was last used if it was above 30 days then we delete the snapshot

we made use of describe instance, describe snapshot and list instance and snapshot policy.

steps

go to boto3

list all the instance, volumes and snapshots.

verify if the snapshot belongs to volume and the volume is attached to an instance.