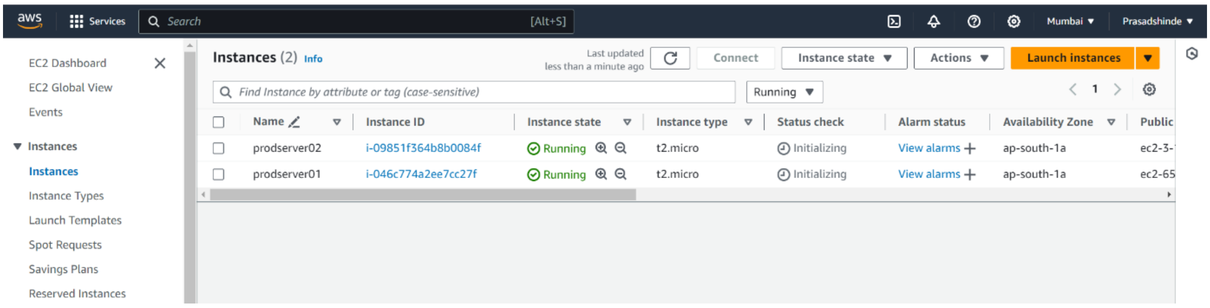
Lambda function -29th August

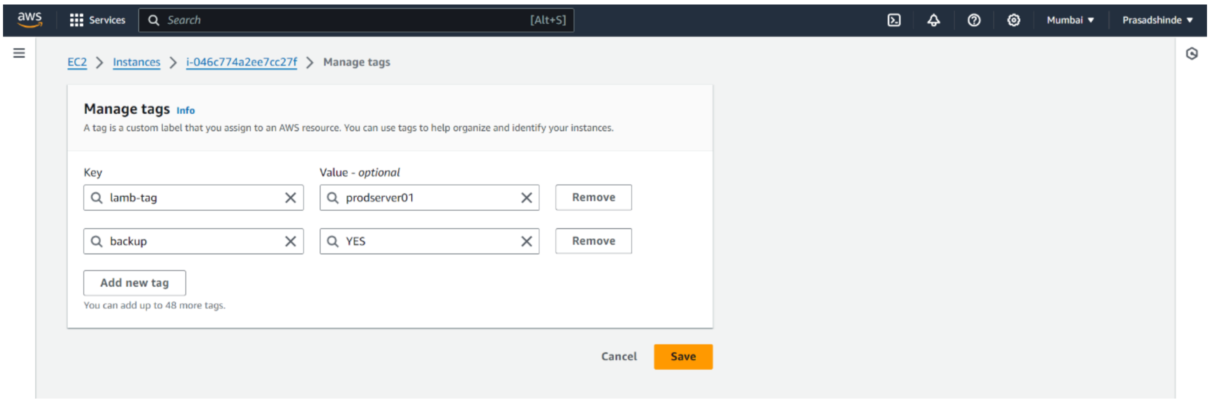
1. Create two instance (Prodserver01/02) on EC2 server



Instances (2) Info

□	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public
□	prodserver02	i-09851f364b8b0084f	Running	t2.micro	Initializing	View alarms +	ap-south-1a	ec2-3-
□	prodserver01	i-046c774a2ee7cc27f	Running	t2.micro	Initializing	View alarms +	ap-south-1a	ec2-65

2.Add tag for one instance



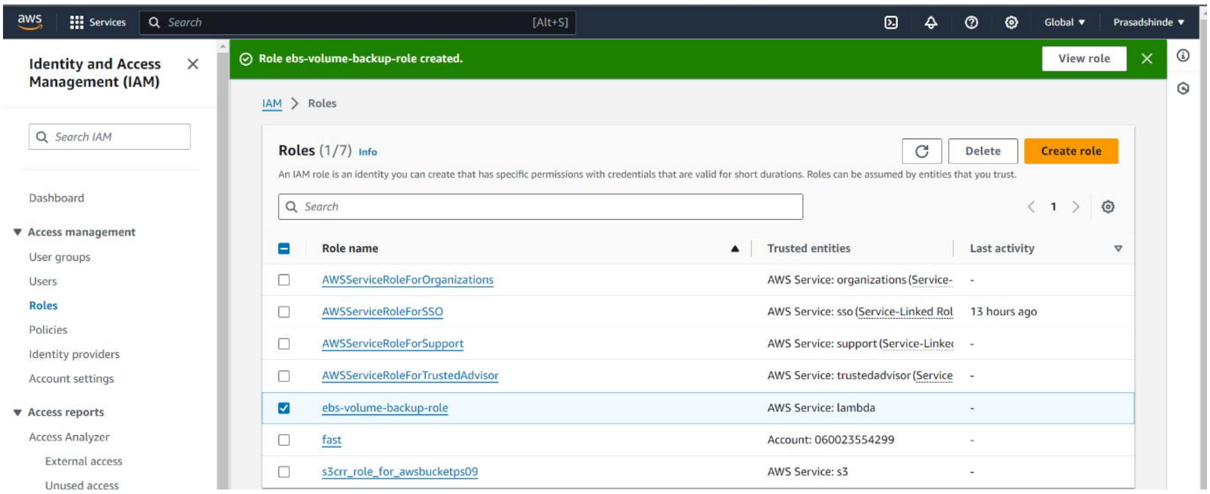
Manage tags Info

A tag is a custom label that you assign to an AWS resource. You can use tags to help organize and identify your instances.

Key	Value - *optional*
lamb-tag	prodserver01
backup	YES

You can add up to 48 more tags.

3.Create a IAM role for lambda service(ebs-volume-backup-role)



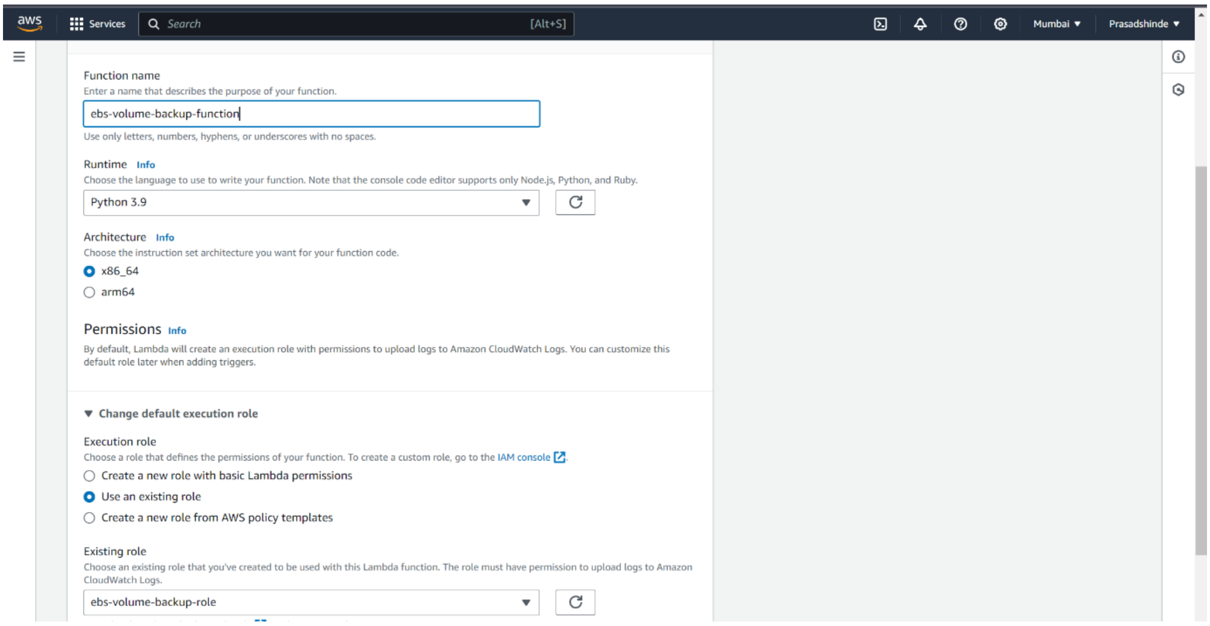
Role ebs-volume-backup-role created.

Roles (1/7) Info

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

	Role name	Trusted entities	Last activity
□	AWSServiceRoleForOrganizations	AWS Service: organizations (Service-	-
□	AWSServiceRoleForSSO	AWS Service: sso (Service-Linked Rol	13 hours ago
□	AWSServiceRoleForSupport	AWS Service: support (Service-Linke	-
□	AWSServiceRoleForTrustedAdvisor	AWS Service: trustedadvisor (Service	-
☑	ebs-volume-backup-role	AWS Service: lambda	-
□	fast	Account: 060023554299	-
□	s3crr_role_for_awsbucketps09	AWS Service: s3	-

4.while creating lambda fuction select a common scripting language and add role



Function name
Enter a name that describes the purpose of your function.
ebs-volume-backup-function
Use only letters, numbers, hyphens, or underscores with no spaces.

Runtime Info
Choose the language to use to write your function. Note that the console code editor supports only Node.js, Python, and Ruby.
Python 3.9

Architecture Info
Choose the instruction set architecture you want for your function code.
● x86_64
○ arm64

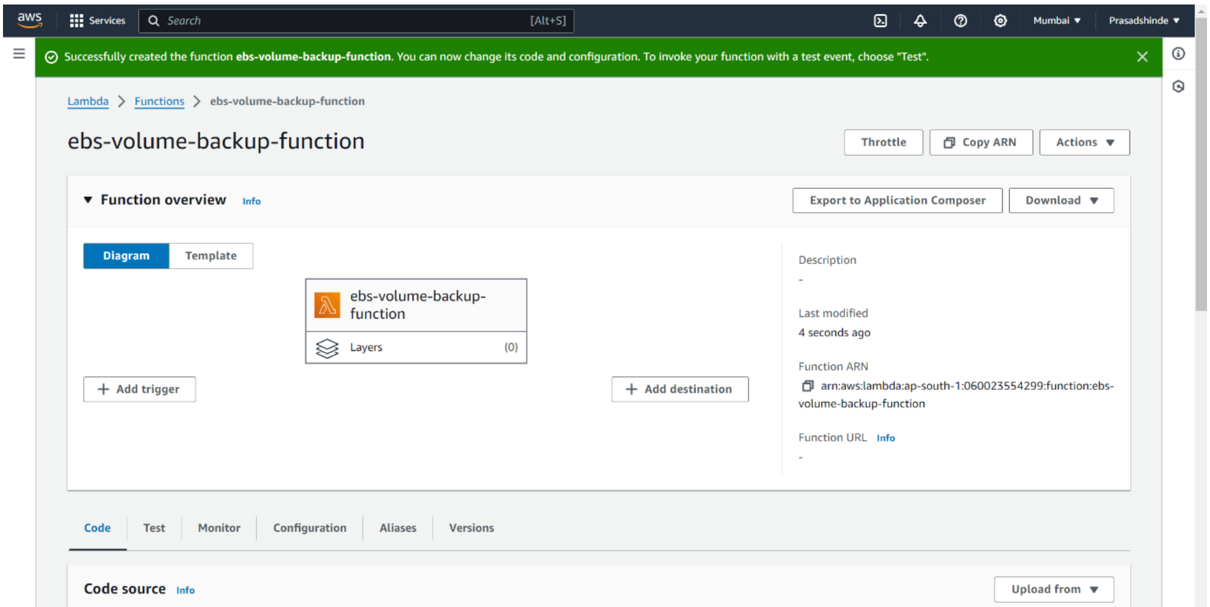
Permissions Info
By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.

▼ Change default execution role

Execution role
Choose a role that defines the permissions of your function. To create a custom role, go to the IAM console.
○ Create a new role with basic Lambda permissions
● Use an existing role
○ Create a new role from AWS policy templates

Existing role
Choose an existing role that you've created to be used with this Lambda function. The role must have permission to upload logs to Amazon CloudWatch Logs.
ebs-volume-backup-role

5.Create the function



Successfully created the function **ebs-volume-backup-function**. You can now change its code and configuration. To invoke your function with a test event, choose "Test".

ebs-volume-backup-function

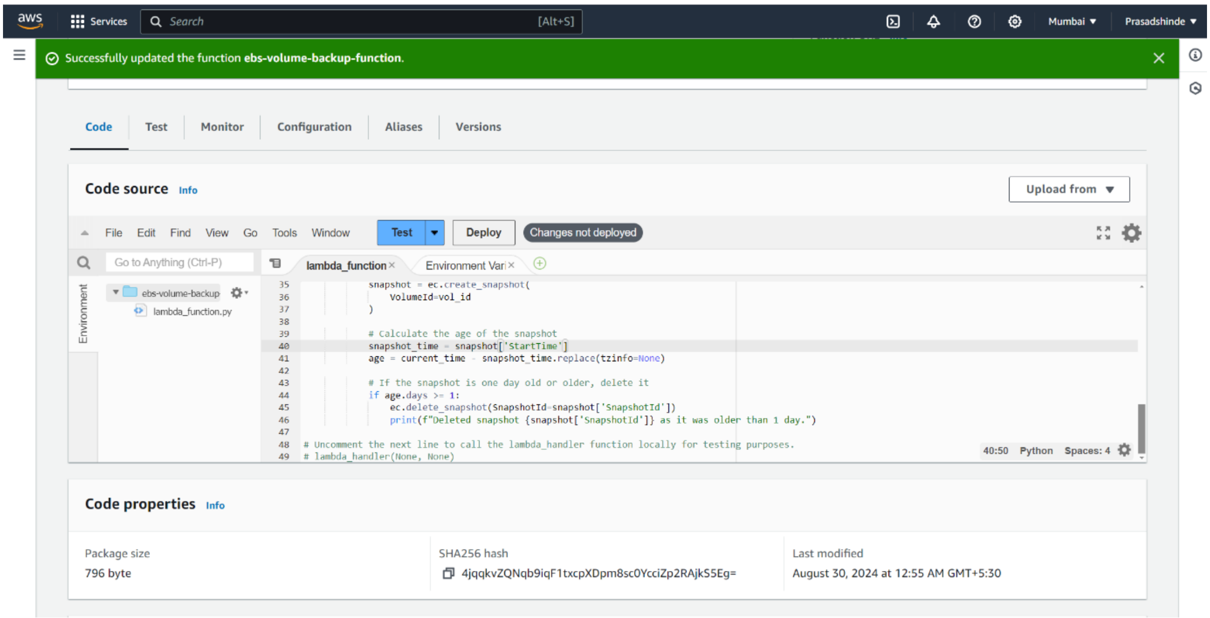
Description
-

Last modified
4 seconds ago

Function ARN
arn:aws:lambda:ap-south-1:060023554299:function:ebs-volume-backup-function

Function URL Info
-

6. Deploy the code



Successfully updated the function **ebs-volume-backup-function**.

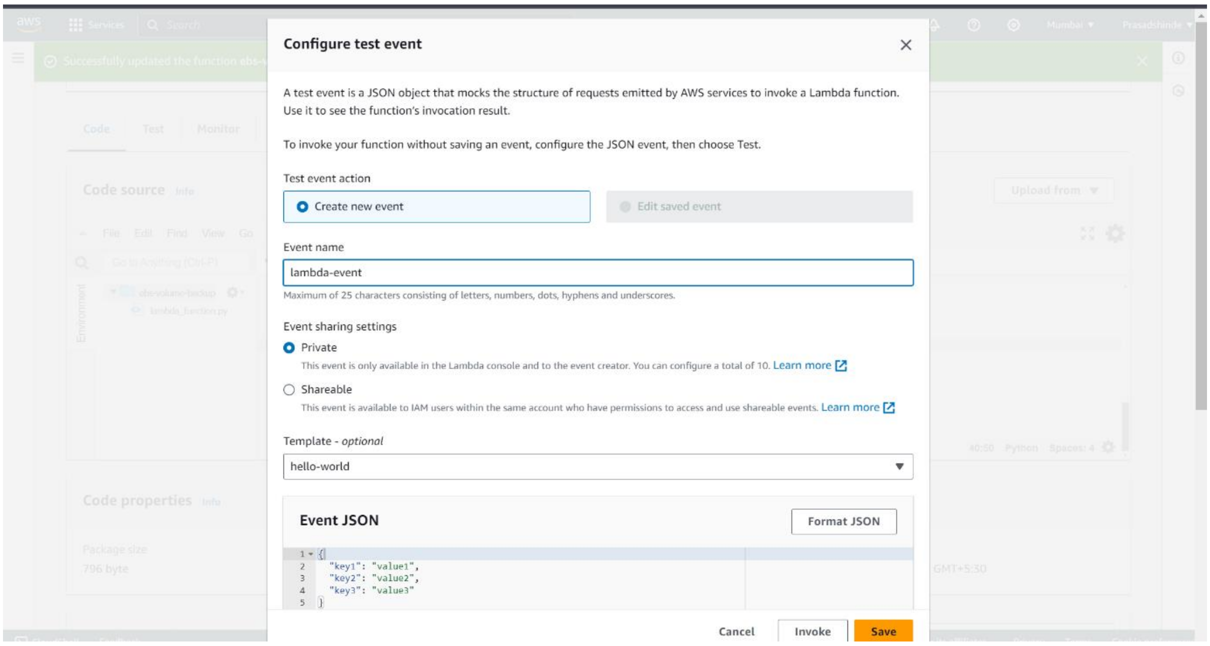
```
            snapshot = ec.create_snapshot(
                VolumeId=vol_id
            )

            # Calculate the age of the snapshot
            snapshot_time = snapshot['StartTime']
            age = current_time - snapshot_time.replace(tzinfo=None)

            # If the snapshot is one day old or older, delete it
            if age.days >= 1:
                ec.delete_snapshot(SnapshotId=snapshot['SnapshotId'])
                print(f"Deleted snapshot {snapshot['SnapshotId']} as it was older than 1 day.")

# Uncomment the next line to call the lambda_handler function locally for testing purposes.
# lambda_handler(None, None)
```

Package size
796 byte

SHA256 hash
4jqqkvZQNqb9iqF1txcpXDpm8sc0YcciZp2RAjkS5Eg=

Last modified
August 30, 2024 at 12:55 AM GMT+5:30

7. Test event for run the code



Configure test event

A test event is a JSON object that mocks the structure of requests emitted by AWS services to invoke a Lambda function. Use it to see the function's invocation result.

To invoke your function without saving an event, configure the JSON event, then choose Test.

Test event action

● Create new event ○ Edit saved event

Event name: lambda-event

Maximum of 25 characters consisting of letters, numbers, dots, hyphens and underscores.

Event sharing settings

● Private

This event is only available in the Lambda console and to the event creator. You can configure a total of 10. Learn more

○ Shareable

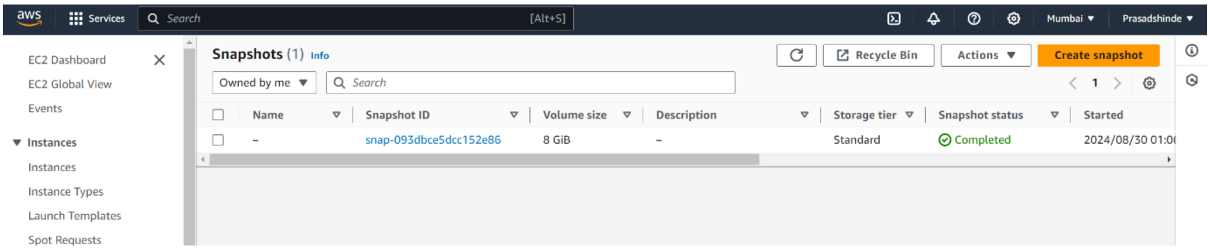
This event is available to IAM users within the same account who have permissions to access and use shareable events. Learn more

Template - *optional*: hello-world

Event JSON

```
{
  "key1": "value1",
  "key2": "value2",
  "key3": "value3"
}
```

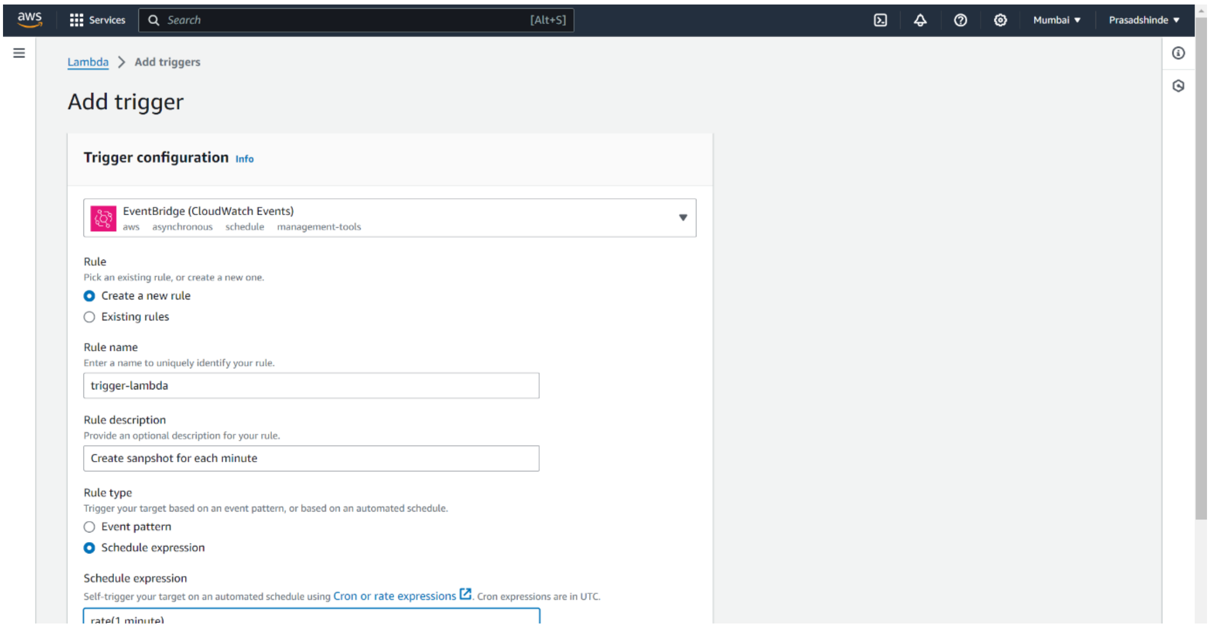
8.sanpshot is created



Snapshots (1) Info

Name	Snapshot ID	Volume size	Description	Storage tier	Snapshot status	Started
–	snap-093dbce5dcc152e86	8 GiB	–	Standard	✓ Completed	2024/08/30 01:0(

9.Create trigger for each minute



Lambda > Add triggers

Add trigger

Trigger configuration Info

EventBridge (CloudWatch Events)
aws asynchronous schedule management-tools

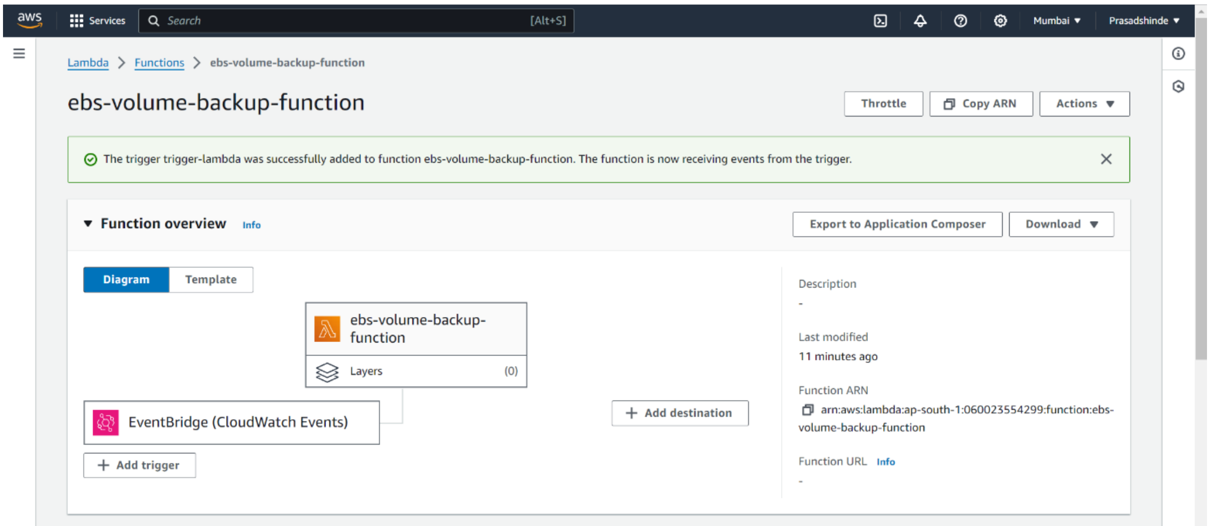
Rule
Pick an existing rule, or create a new one.
● Create a new rule
○ Existing rules

Rule name
Enter a name to uniquely identify your rule.
trigger-lambda

Rule description
Provide an optional description for your rule.
Create sanpshot for each minute

Rule type
Trigger your target based on an event pattern, or based on an automated schedule.
○ Event pattern
● Schedule expression

Schedule expression
Self-trigger your target on an automated schedule using Cron or rate expressions. Cron expressions are in UTC.
rate(1 minute)



Lambda > Functions > ebs-volume-backup-function

ebs-volume-backup-function

The trigger trigger-lambda was successfully added to function ebs-volume-backup-function. The function is now receiving events from the trigger.

Function overview Info

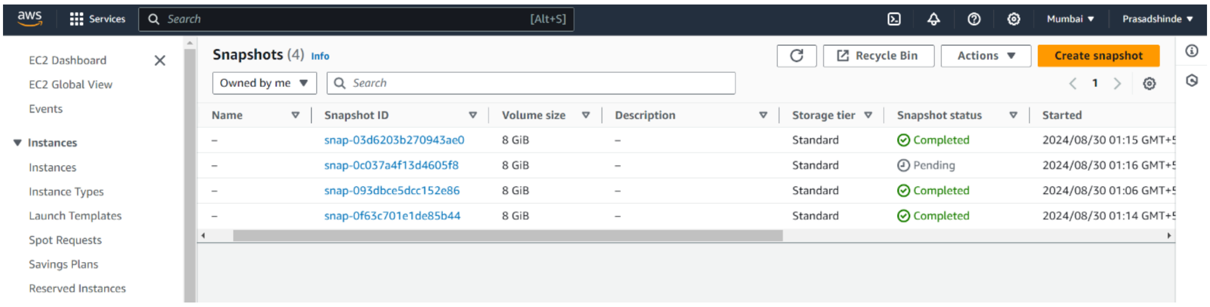
Description
-

Last modified
11 minutes ago

Function ARN
arn:aws:lambda:ap-south-1:060023554299:function:ebs-volume-backup-function

Function URL Info
-

10. sanpshot is created for every one minute



Snapshots (4) Info

Name	Snapshot ID	Volume size	Description	Storage tier	Snapshot status	Started
–	snap-03d6203b270943ae0	8 GiB	–	Standard	✓ Completed	2024/08/30 01:15 GMT+5
–	snap-0c037a4f13d4605f8	8 GiB	–	Standard	Pending	2024/08/30 01:16 GMT+5
–	snap-093dbce5dcc152e86	8 GiB	–	Standard	✓ Completed	2024/08/30 01:06 GMT+5
–	snap-0f63c701e1de85b44	8 GiB	–	Standard	✓ Completed	2024/08/30 01:14 GMT+5