

First Have to create in AWS. Then search for Lambda.

The image shows two screenshots of the AWS Management Console. The top screenshot displays the 'History' page with a search bar containing 'lambda'. The search results are categorized into several groups: Compute (EC2, Lightsail, Lambda, Batch, Elastic Beanstalk, Serverless Application Repository, AWS Outposts, EC2 Image Builder), Storage (S3, EFS, FSx, S3 Glacier, Storage Gateway, AWS Backup), Database (RDS, DynamoDB, ElastiCache, Neptune, Amazon Redshift, Amazon QLDB, Amazon DocumentDB, Amazon Keyspaces), Blockchain (Amazon Managed Blockchain), Satellite (Ground Station), Quantum Technologies (Amazon Braket), Management & Governance (AWS Organizations, CloudWatch, AWS Auto Scaling, CloudFormation, CloudTrail, Config, OpsWorks, Service Catalog, Systems Manager, AWS AppConfig, Trusted Advisor, Control Tower, AWS License Manager, AWS Well-Architected Tool, Personal Health Dashboard, AWS Chatbot, Launch Wizard), Analytics (Athena, EMR, CloudSearch, Elasticsearch Service, Kinesis, QuickSight, Data Pipeline, AWS Data Exchange, AWS Glue, AWS Lake Formation, MSK), Security, Identity, & Compliance (IAM, Resource Access Manager, Cognito, Secrets Manager, GuardDuty, Inspector, Amazon Macie, AWS Single Sign-On, Certificate Manager, Key Management Service, CloudHSM, Directory Service, WAF & Shield, AWS Firewall Manager, Artifact), Business Applications (Alexa for Business, Amazon Chime, WorkMail, Amazon Honeycode), End User Computing (WorkSpaces, AppStream 2.0, WorkDocs, WorkLink), Internet Of Things (IoT Core, FreeRTOS, IoT 1-Click, IoT Analytics, IoT Device Defender, IoT Device Management, IoT Events, IoT Greengrass, IoT SiteWise, IoT Things Graph), and Game Development (Amazon GameLift). The bottom screenshot shows the 'Lambda > Functions' page. It features a 'Functions (0)' header with a refresh button, an 'Actions' dropdown, and a 'Create function' button. Below this is a search bar with the placeholder text 'Filter by tags and attributes or search by keyword'. A table with columns 'Function name', 'Description', 'Runtime', 'Code size', and 'Last modified' is shown, but it contains no data, displaying the message 'There is no data to display.' The left sidebar includes links to 'Dashboard', 'Applications', 'Functions' (highlighted), 'Additional resources', and 'Layers'. The bottom of the console shows the footer with 'Feedback', 'English (US)', and copyright information for 2008-2020 Amazon Internet Services Private Ltd.

## Create a Lambda Function

The screenshot shows the AWS Lambda console interface for creating a new function. The browser address bar indicates the URL is `ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/create/function`. The console header shows the user is logged in as 'panchanan\_mal' in the 'Mumbai' region.

**Create function** [Info](#)

Choose one of the following options to create your function.

- Author from scratch** ☒  
Start with a simple Hello World example.
- Use a blueprint** ☐  
Build a Lambda application from sample code and configuration presets for common use cases.
- Browse serverless app repository** ☐  
Deploy a sample Lambda application from the AWS Serverless Application Repository.

**Basic information**

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

**Runtime** [Info](#)  
Choose the language to use to write your function.

**Permissions** [Info](#)  
Lambda will create an execution role with permission to upload logs to Amazon CloudWatch Logs. You can configure and modify permissions further when you add triggers.

**Choose or create an 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

**Learn more** [What is AWS Lambda?](#)  
[Managing AWS Lambda functions](#)

rest-api-with-lambda - Lambda x +

ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/rest-api-with-lambda?newFunction=true&tab=configuration

configuration. To invoke your function with a test event, choose "Test".

Lambda > Functions > rest-api-with-lambda

ARN - arn:aws:lambda:ap-south-1:967911585120:function:rest-api-with-lambda

## rest-api-with-lambda

Throttle Qualifiers Actions Select a test ... Test

Save

Configuration Permissions Monitoring

▼ Designer

rest-api-with-lambda

Layers (0)

+ Add trigger + Add destination

Feedback English (US)

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21:16 15-08-2020

### Function configuration

Use the function designer to add triggers, layers, and destinations to your function. To modify the function's code and configuration, choose the function node in the center of the designer.

For functions in Node.js, Python, and Ruby, you can modify function code in the embedded AWS Cloud9 IDE.

Triggers are AWS services or

## Add the Triggers(Here we are deploying the Lambda in API GateWay)

The image displays two screenshots of the AWS Lambda console interface, illustrating the process of adding a trigger to a Lambda function.

**Top Screenshot: Select a trigger**

The "Add trigger" page is shown. Under "Trigger configuration", the "Select a trigger" dropdown menu is open, displaying a list of available services:

- API Gateway (api, application-services, aws, serverless)
- AWS IoT (aws, devices, iot)
- Alexa Skills Kit (alexa, iot)
- Application Load Balancer (aws, load-balancing)
- CloudWatch Logs (aws, logging, management-tools)
- CodeCommit (aws, developer-tools, git)

**Bottom Screenshot: API Gateway configuration**

The "Add trigger" page is shown with "API Gateway" selected. The configuration details are as follows:

- API:** "Create a new API or attach an existing one." The dropdown menu shows "Create an API".
- API type:** Two radio buttons are present: "HTTP API" (Create an HTTP API.) and "REST API" (Create a REST API.).
- Security:** "Configure the security mechanism for your API endpoint." A dropdown menu is shown below the text.

**Triggers sidebar:** A sidebar on the right explains the concept of a trigger: "A trigger is a service or resource that invokes your function. Choose a service from the list to see the available options. When you add a trigger, the console configures the resources and permissions required to use it. Most services invoke your function directly with an event structure that is specific per service. However, for some services, Lambda reads service data and..."

## Have to create REST API

ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/add/relation?focus=lambda&target=arn%3Aaws%3Alambda%3Aap-south-1...

Services Resource Groups

api application-services aws serverless

Add an API to your Lambda function to create an HTTP endpoint that invokes your function. API Gateway supports two types of RESTful APIs: HTTP APIs and REST APIs. [Learn more](#)

API

Create a new API or attach an existing one.

Create an API

API type

☐ HTTP API  
Create an HTTP API.

☒ REST API  
Create a REST API.

Security

Configure the security mechanism for your API endpoint.

Open

Don't add any authorization or authentication requirements. Any user can invoke your function with an HTTP call.

▼ Additional settings

API name

Choose a name for your API. API names don't need to be unique.

lambda-api-product-rating-service

Deployment stage

Triggers

A trigger is a service or resource that invokes your function. Choose a service from the list to see the available options. When you add a trigger, the console configures the resources and permissions required to use it.

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Type here to search

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rest-api-with-lambda - Lambda

ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/rest-api-with-lambda?tab=configuration

aws Services Resource Groups

panchanan\_mal Mumbai Support

# rest-api-with-lambda

Throttle Qualifiers Actions Select a test ... Test

Save

Configuration Permissions Monitoring

## ▼ Designer

rest-api-with-lambda

Layers (0)

API Gateway

+ Add trigger

+ Add destination

### Function configuration

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Triggers are AWS services or

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Type here to search

## Configure test event

A function can have up to 10 test events. The events are persisted so you can switch to another computer or web browser and test your function with the same events.

☒ Create new test event  
☐ Edit saved test events

Event template  
hello-world

Event name  
TestEvent

```
1 {  
2   "key1": "value1",  
3   "key2": "value2",  
4   "key3": "value3",  
5 }
```

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rest-api-with-lambda - Lambda

ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/rest-api-with-lambda?tab=configuration

Services Resource Groups

# rest-api-with-lambda

Throttle Qualifiers Actions TestEvent **Test**

Save

rest-api-with-lambda. The function is now receiving events from the trigger.

Configuration Permissions Monitoring

## ▼ Designer

rest-api-with-lambda

Layers (0)

API Gateway

+ Add trigger

+ Add destination

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Type here to search

rest-api-with-lambda - Lambda

ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/rest-api-with-lambda?tab=configuration

Services Resource Groups

# rest-api-with-lambda

Throttle Qualifiers Actions TestEvent Test

Save

✓ Execution result: succeeded (logs)

▼ Details

The area below shows the result returned by your function execution. [Learn more](#) about returning results from your function.

```
{
  "body": "Hello from Lambda!",
  "statusCode": 200
}
```

### Summary

Code SHA-256	Request ID
+5OFdvMKaO8/kzr0r4xnmDOEQnUU0/aHkDjIF2GtoUw=	e375124f-e463-4264-98c7-933a4b5de581
Duration	Billed duration
132.17 ms	200 ms
Resources configured	Max memory used

### Function configuration

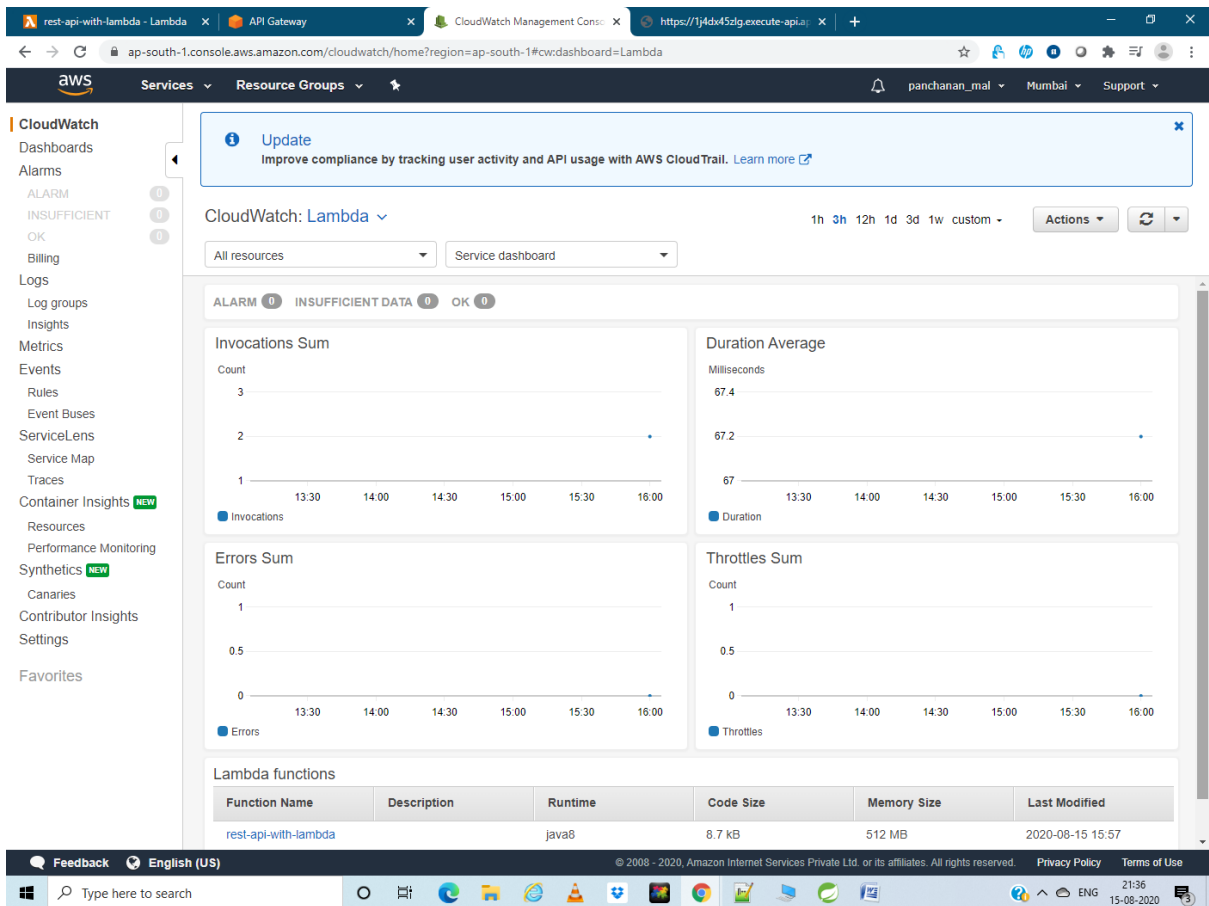
Use the function designer to add triggers, layers, and destinations to your function. To modify the function's code and configuration, choose the function node in the center of the designer.

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Triggers are AWS services or

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Type here to search





This is the Log cloud watch where We can see the all logs

The screenshot displays the AWS CloudWatch Logs console. The left sidebar contains a navigation menu with options like CloudWatch, Dashboards, Alarms, and Logs. The main content area shows the 'Log groups' page. At the top, there's a notification banner about user interface enhancements. Below this, a 'Log groups (1)' section includes a search bar, a 'Filter log groups' input, and a table of log groups. The table has columns for Log group, Retention, Metric filters, Contributor Insights, and a 'Su...' column. One log group is listed: [/aws/lambda/rest-api-with-lambda](#) with a retention of 'Never expire'. A 'Create log group' button is visible in the top right of the log groups section.

CloudWatch > CloudWatch Logs > Log groups [Switch to the original interface.](#)

**We listened to your feedback!**  
In response to your comments on usability, we enhanced our user interface. Please feel free to send us your feedback. [Switch to the original interface.](#) [Send us feedback](#) X

**Log groups (1)** [Refresh](#) [Actions](#) [View in Logs Insights](#) [Create log group](#)

☐ Exact match < 1 > [Settings](#)

<input type="checkbox"/>	Log group	Retention	Metric filters	Contributor Insights	Su...
<input type="checkbox"/>	<a href="#">/aws/lambda/rest-api-with-lambda</a>	Never expire	-	-	-

[https://ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#logsV2/log-groups/log-group/\\$252faws\\$252fLambda\\$252frest-api-with-lambda](#) Services Private Ltd. or its affiliates. All rights reserved. [Privacy Policy](#) [Terms of Use](#)

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rest-api-with-lambda - Lambda

API Gateway

CloudWatch Management Console

https://1j4de45d9g.execute-api.ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#logsV2/log-groups/log-group/\$252faws\$252fLambda\$252frest-api-with-lambda

ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#logsV2/log-groups/log-group/\$252faws\$252fLambda\$252frest-api-with-lambda

CloudWatch

Dashboards

Alarms

ALARM

INSUFFICIENT

OK

Billing

Logs

Log groups

Insights

Metrics

Events

Rules

Event Buses

ServiceLens

Service Map

Traces

Container Insights

Resources

Performance Monitoring

Synthetics

Canaries

Contributor Insights

Settings

Favorites

CloudWatch > CloudWatch Logs > Log groups > /aws/lambda/rest-api-with-lambda > 2020/08/15/[\$LATEST]01ca20b9cdb14d2e8b4b10a057b1e6de

Switch to the original interface.

Try CloudWatch Logs Insights

CloudWatch Logs insights allows you to search and analyze your logs using a new, purpose-built query language. To learn more, read the [AWS blog](#) or visit our [documentation](#).

Try Logs Insights

Log events

Filter events

Cl

1

3

1

1

Custom

ea

m

0

h

2

▶

Timestamp

Message

▶

2020-08-15T21:31:51.475+05:30

There are older events to load. [Load more](#).

▶

2020-08-15T21:31:51.608+05:30

START RequestId: e375124f-e463-4264-98c7-933a4b5de581 Version: \$LATEST

▶

2020-08-15T21:31:51.608+05:30

END RequestId: e375124f-e463-4264-98c7-933a4b5de581

▶

2020-08-15T21:31:51.608+05:30

REPORT RequestId: e375124f-e463-4264-98c7-933a4b5de581 Duration: 132.17 ms Billed Duration: 200 ms Memory Size: 5

▶

2020-08-15T21:33:39.847+05:30

START RequestId: 7733da6b-222c-43be-835f-41fcc6f152f3 Version: \$LATEST

▶

2020-08-15T21:33:39.853+05:30

END RequestId: 7733da6b-222c-43be-835f-41fcc6f152f3

▶

2020-08-15T21:33:39.853+05:30

REPORT RequestId: 7733da6b-222c-43be-835f-41fcc6f152f3 Duration: 2.25 ms Billed Duration: 100 ms Memory Size: 512

No newer events at this moment. [Auto retry paused](#). [Resume](#)

Feedback English (US)

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Type here to search

ENG

21:38

15-08-2020

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## Have to stage the RestAPI

The screenshot shows the AWS API Gateway console interface. The breadcrumb navigation indicates the path: **APIs** > **lambda-api-product-rating-service...** (1j4dx45zlg) > **Resources** > **/rest-api-with-lambda/{id}** (0s5ugn) > **GET**. The left sidebar contains navigation links for APIs, Custom Domain Names, VPC Links, and a list of resources including **API: lambda-api-pro...**, **Resources**, **Stages**, **Authorizers**, **Gateway Responses**, **Models**, **Resource Policy**, **Documentation**, **Dashboard**, **Settings**, **Usage Plans**, **API Keys**, **Client Certificates**, and **Settings**.

The main content area is titled **/rest-api-with-lambda/{id} - GET - Method Execution**. It features a **TEST** button and a diagram illustrating the request flow:

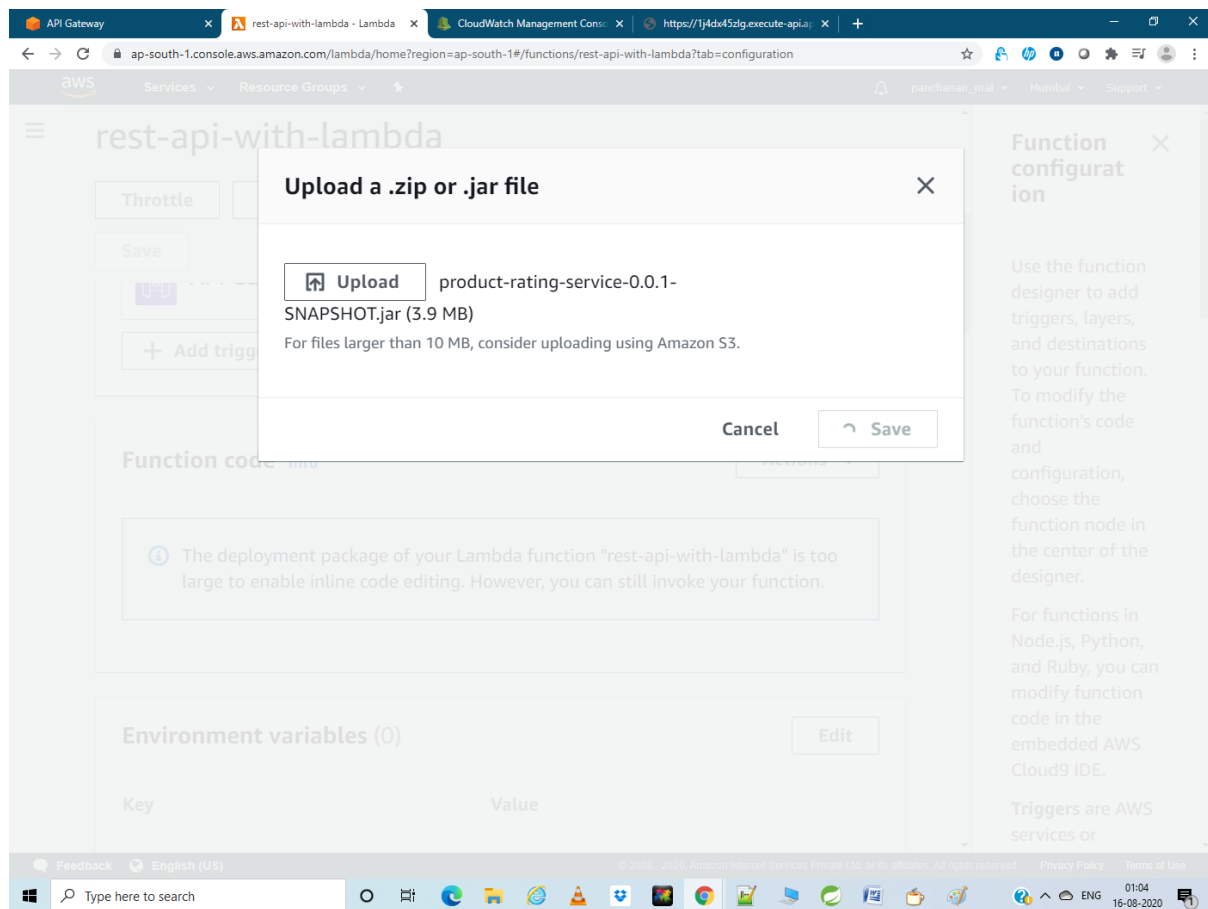
- Client**: The starting point of the request.
- Method Request**: Contains the following details:
  - Auth**: NONE
  - ARN**: am:aws:execute-api:ap-south-1:967911585120:1j4dx45zlg/\*GET/rest-api-with-lambda/\*
- Integration Request**: Contains the following details:
  - Type**: LAMBDA
  - Region**: ap-south-1
- Lambda rest-api-with-lambda**: The target function for the integration.
- Method Response**: Contains the following details:
  - HTTP Status**: 200
  - Models**: application/json => Empty
- Integration Response**: Contains the following details:
  - HTTP status pattern**: -
  - Output passthrough**: Yes

The diagram shows the flow from the Client to the Method Request, then to the Integration Request, and finally to the Lambda function. The Method Response and Integration Response are shown as the result of the execution.

The footer of the console displays the following information:

- Feedback** and **English (US)** links.
- Copyright notice: © 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
- Privacy Policy** and **Terms of Use** links.
- System tray information: 00:37, 16-08-2020, ENG.

Have to Upload the code(if the file size is more than 10 MB it will got to S3 Bucket )



Below is the git Hub URL

<https://github.com/panchanan1991/RestApi-AWS-Lambda>

This API will expose Movie id, Movie name, Movie details, Movie Release date, Overview of the movie and movie rating. Below is the API Details , Use have to provide the movie id (Which is basically 100-999, if any id is wrong it will give response like id is not correct)

**/rest-api-with-lambda/{id} - GET - Method Execution**

After hitting lambda api,

