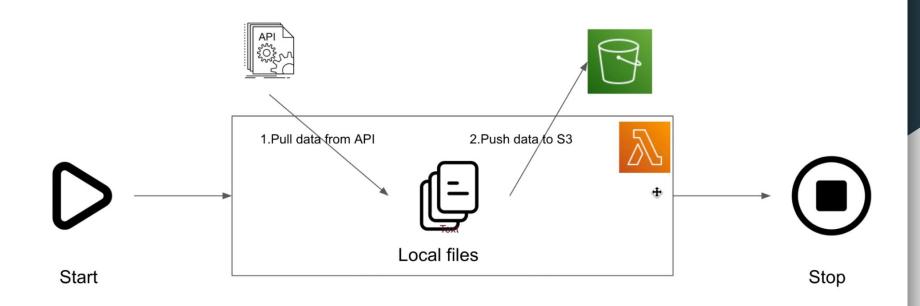
Sending Emails





API Gateway



APIs Custom domain names

VPC links

Networking & Content Delivery

Amazon API Gateway create, maintain, and secure APIs at any scale

Amazon API Gateway helps developers to create and manage APIs to back-end systems running on Amazon EC2, AWS Lambda, or any publicly addressable web service. With Amazon API Gateway, you can generate custom client SDKs for your APIs, to connect your back-end systems to mobile, web, and server applications or services.

First we created an HTTP API in the AWS API Gateway

Choose an API type

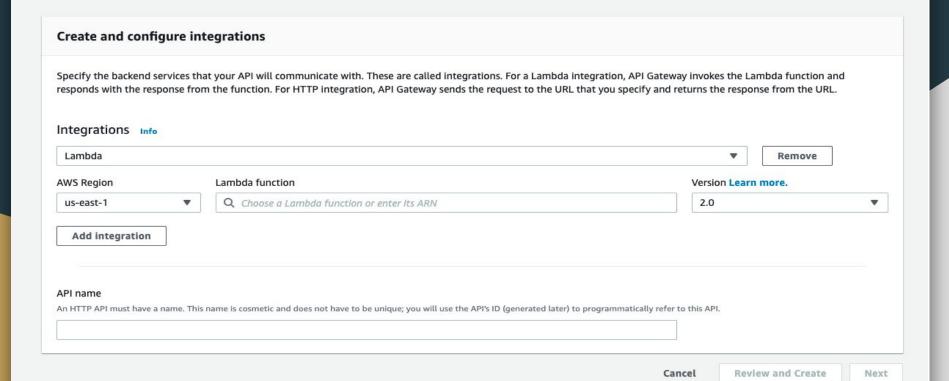
HTTP API

Build low-latency and cost-effective REST APIs with built-in features such as OIDC and OAuth2, and native CORS support.

Works with the following: Lambda, HTTP backends



Create an API



API Gateway

APIs

Custom domain names

VPC links

Step 1

X

Create an API

Step 2

Configure routes

Step 3

Define stages

Step 4

Review and create

Create an API

Create and configure in	tegrations			
	at your API will communicate with. These are called integrations. For a Lambda integration, API Gatewa m the function. For HTTP integration, API Gateway sends the request to the URL that you specify and r			
Integrations Info				
Lambda		▼	Remove	
AWS Region	Lambda function	Version Learn more.		
us-east-1 Add by action In a duplicate w	Q Choose a Lambda function or enter its ARN indow, we created a new Lambda Function called APItoEmail	then pulle	ed it in here	•
API name An HTTP API must have a name. Thi	rname is cosmetic and does not have to be unique; you will use the API's ID (generated later) to programmatically refer	to this API.		

Cancel

Review and Create

Next

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.

Container image

Select a container image to deploy for your function.

Browse serverless app repository

.

Deploy a sample Lambda application from the AWS Serverless Application Repository.

Basic information

Here we name our Function. In this case we called this function News

Function name

Enter a name that describes the purpose your fu

myFunctionNami

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.

0

Node.js 14.x

Permissions Info

Python 3.8

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
- ▶ Advanced settings

Create an API

Create and configure integrations

Specify the backend services that your API will communicate with. These are called integrations. For a Lambda integration, API Gateway invokes the Lambda function and responds with the response from the function. For HTTP integration, API Gateway sends the request to the URL that you specify and returns the response from the URL.

Lambda ▼ Remove AWS Region Lambda function Us-east-1 Version Learn more. Add integration Add integration

API name

An HTTP API must have a name. This name is cosmetic and does not have to be unique; you will use the API's ID (generated later) to programmatically refer to this API.

Configure routes

Configure routes				
	ethods for your integration (GET, POST, PUT, PATCH,		TP APIs consist of two parts: an HTTP method and a resource PTIONS, and DELETE) or use the ANY method to match all me	
Method GET ▼	Resource path /getNews	→	Integration target APItoEmail ▼	Remove
POST ▼	/createNews	→	APItoEmail ▼	Remove
Add route				

These are the two routes that we attempted to get API - we integrated them with the same APItoEmail Lambda Function to save time, we could have created 2 different Lambda Functions one for GET and one for POST

Define stages

Configure stages		
	n be deployed to. You must deploy to a stage for API configuration changes the console have a default stage named \$default. All changes that you development or production.	50 to 150 to
Stage name	Auto-deploy	Remove
\$default		Remove

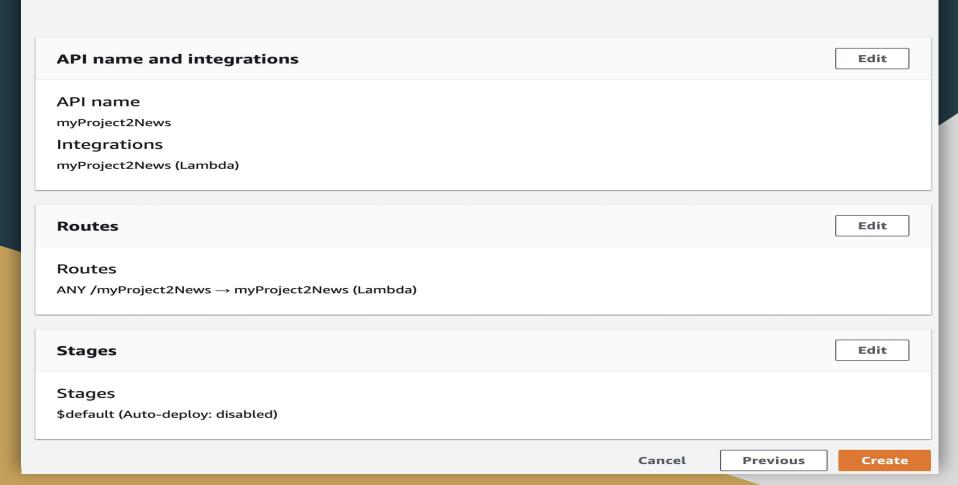
We left the stage name with the default settings. We turned off "Auto-deploy" noting that since we are using a paid API service we want to manually deploy any changes made to the API

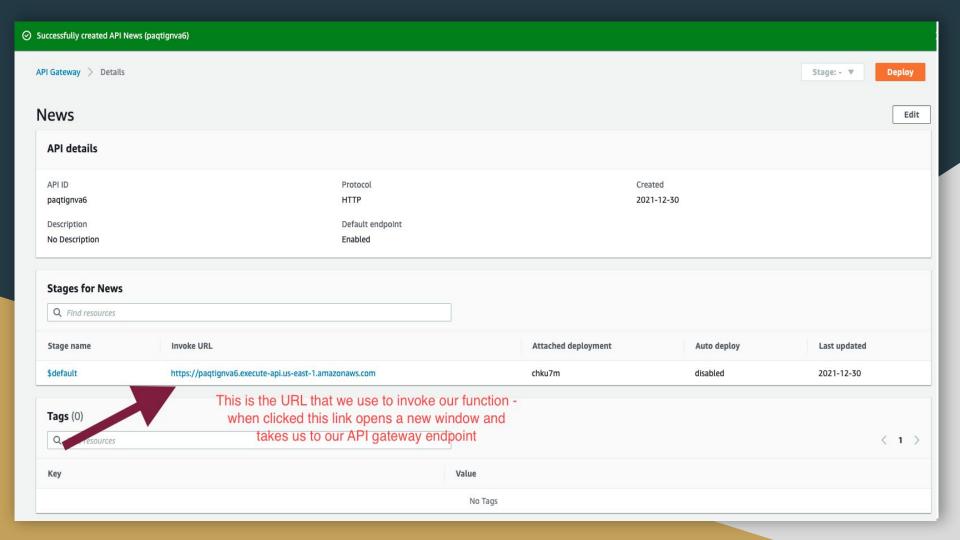
Cancel

Previous

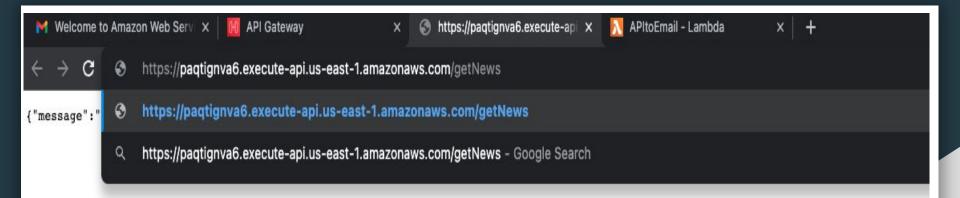
Next

Review and create

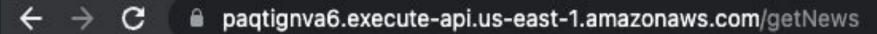






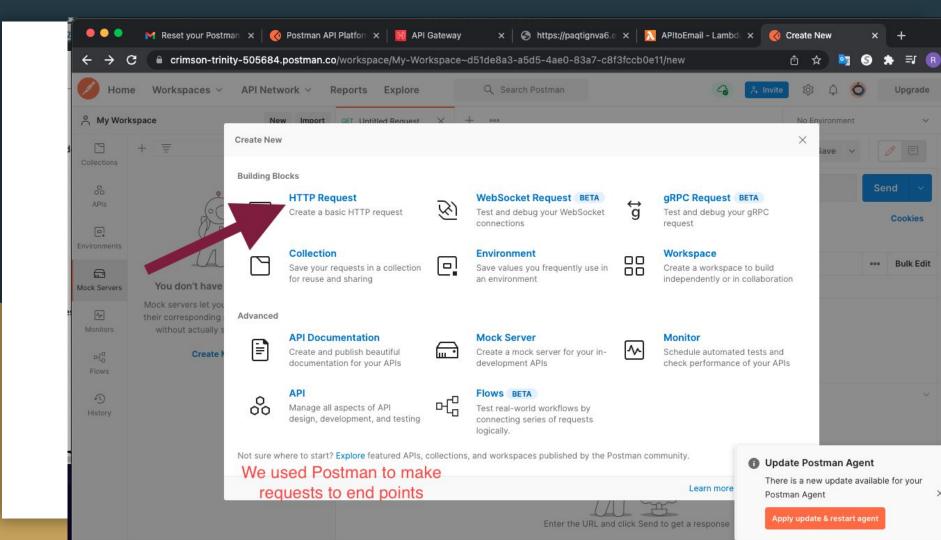


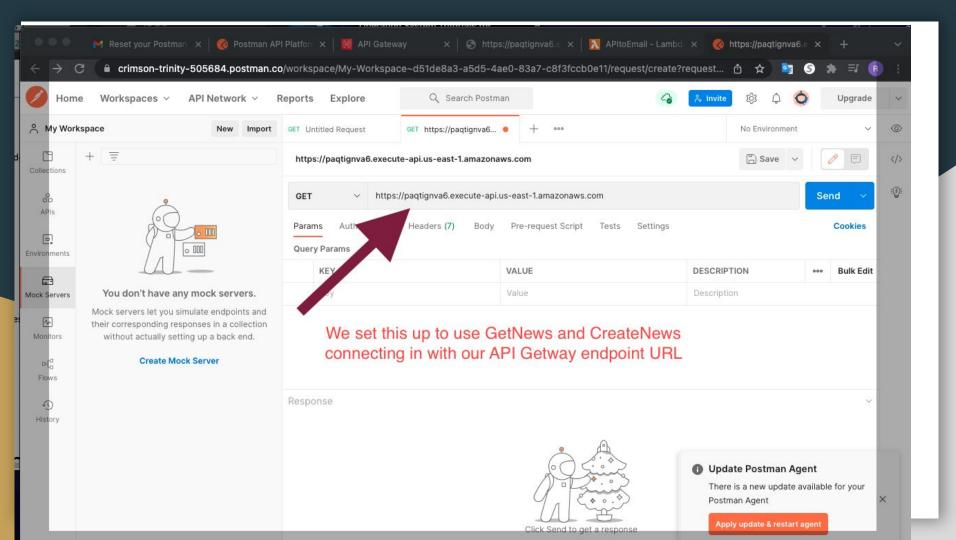
The link brings you to an "message not found" - we added /getNews a the end of the web address to open our lambda function

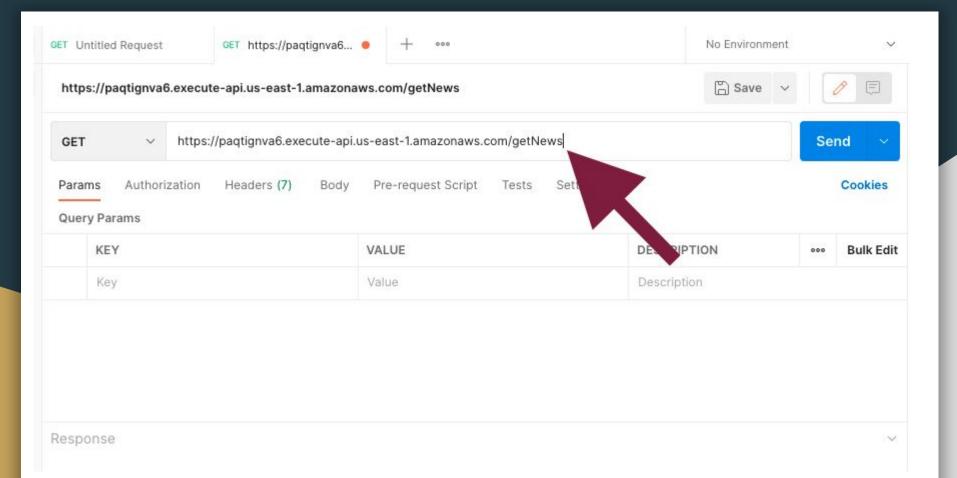


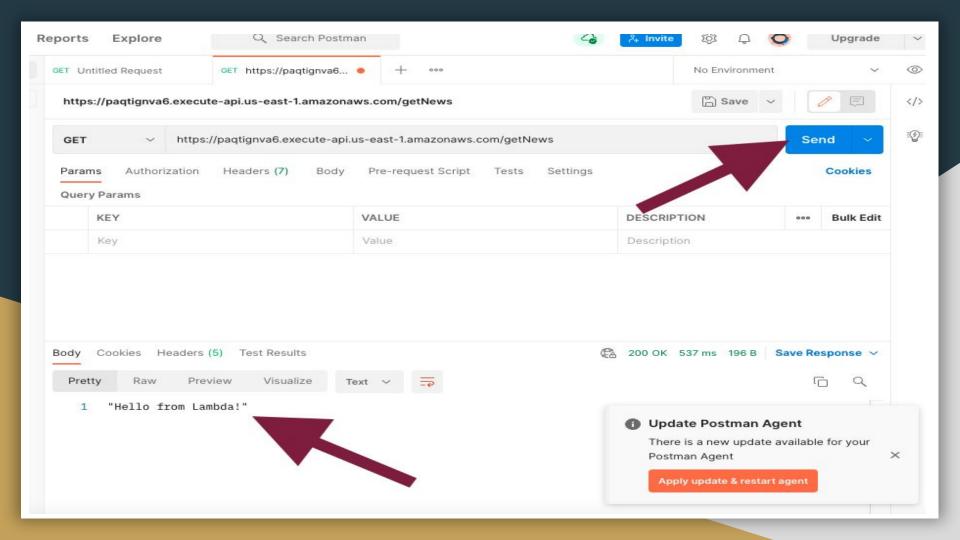
"Hello from Lambda!"

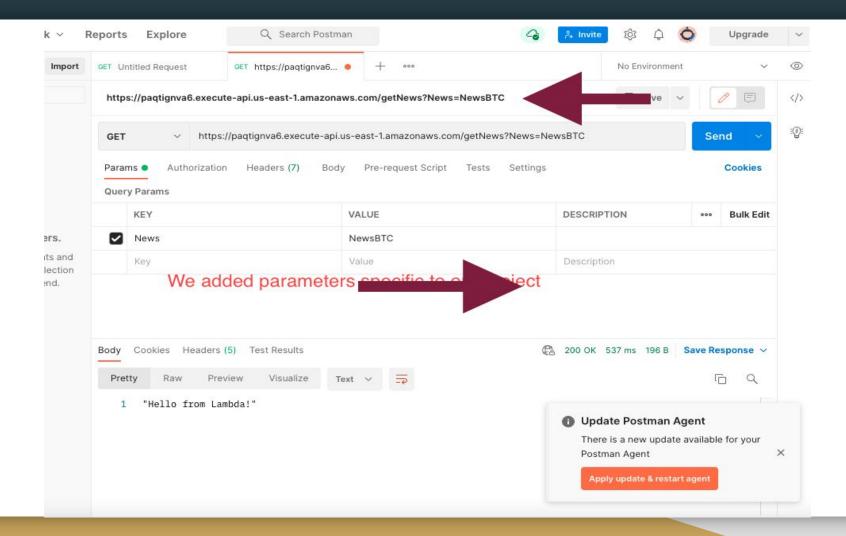


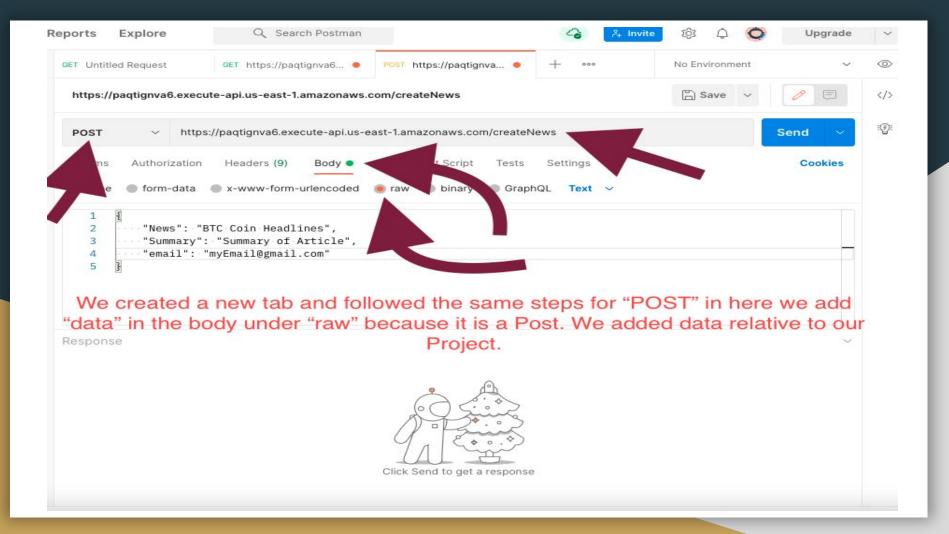






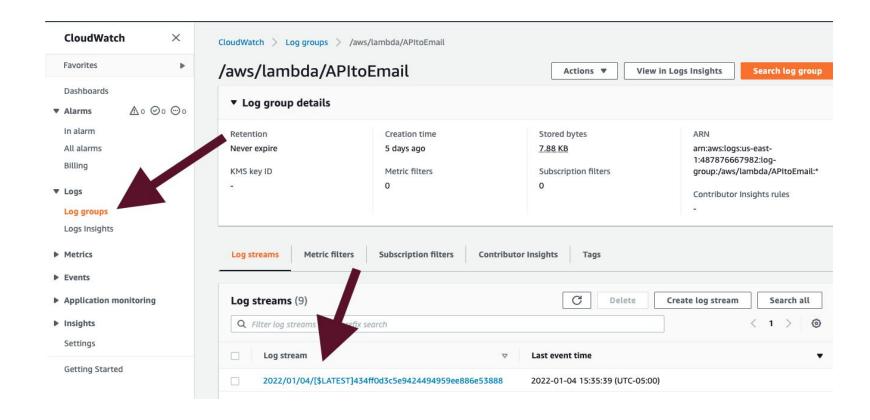


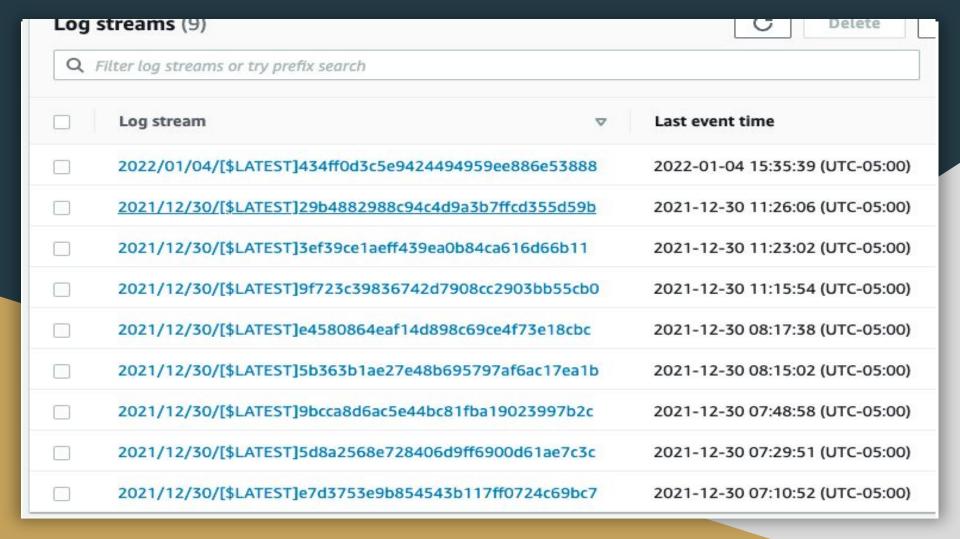




```
"rawQueryString": "personId=personId123",
"headers":{
   "accept":"*/*".
   "accept-encoding": "gzip, deflate, br",
   "accept-language": "en-US, en; q=0.9",
   "cache-control": "no-cache",
   "content-length": "0",
   "host": "prg8ewzsr4.execute-api.us-east-1.amazonaws.com",
   "postman-token": "6259ec56-bcc7-2628-07b8-1e96c5d7a05b",
   "sec-ch-ua":"\" Not A;Brand\";v=\"99\", \"Chromium\";v=\"90\", \"Google Chrome\";v=\"90\"",
   "sec-ch-ua-mobile":"?0",
   "sec-fetch-dest": "empty".
   "sec-fetch-mode": "cors",
   "sec-fetch-site": "none",
   "user-agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
  Chrome/90.0.4430.212 Safari/537.36",
   "x-amzn-trace-id": "Root=1-60b2be91-47a48f7549c602d510a9c469",
   "x-forwarded-for": "24.150.131.11"
   "x-forwarded-port": "443",
   "x-forwarded-proto": "https"
"queryStringParameters":{
   "pe-onId": "personId123"
"requestContext":{
   "accountId": "755314965794",
   "apiId": "prg8ewzsr4",
   "domainName": "prg8ewzsr4.execute-api.us-east-1.amazonaws.com",
   "domainPrefix": "prg8ewzsr4",
   "http":{
      "method": "GET",
      "path": "/getPerson",
      "protocol": "HTTP/1.1",
      "sourceIn": "24, 150, 131
```

```
Code source info
A File Edit Find View Go Tools Window
                                            Deploy
                                                   Changes not deployed
Q Go to Anything (Ctrl-P)
                          lembda function×
    * DemoAppFunction - Ö -
                        1 import json
   D lambda function.py
                        2 import uuid
                        4 GET_RAW_PATH = "/getPerson"
                        5 CREATE_RAW_PATH = "/createPerson"
                          def lambda_handler(event, context):
                              print(event)
                              if event['rawPath'] == GET_RAW_PATH:
                       10
                                   #GetPerson Path - call database
                       11
                                   print("Start Request for GetPerson")
                       12
                                   personId = event['queryStringParameters']['personId']
                                   print("Received request with personId= " + personId)
                       13
                       14
                                   return { "firstName": "Daniel" > lastName": "G", "email": "myEmail@gmail.com"}
                       15
                      16
                              elif event['rawPath'] == CREATE_RAW_PATH:
                      17
                                   #CreatePerson Path - write to database
                       18
                                   print("Start Request for CreatePerson")
                       19
```





▼ 2021-12-30T11:24:45.341-05:00 [ERROR] Runtime.UserCodeSyntaxError: Syntax error in module 'lambda_function': invalid syntax...

[ERROR] Runtime.UserCodeSyntaxError: Syntax error in module 'lambda_function': invalid syntax (lambda_function.py, line 17)

Traceback (most recent call last):

File "/var/task/lambda_function.py" Line 17

elif event['rawPath'] == CREATE_RAW_PATH



This console (Amazon SES classic console) will soon be deprecated.

We encourage you to start using the new Amazon SES console now as the classic console will be deprecated soon. The new console is redesigned for faster access to information and offers new features and functionality including Account dashboard, Default configuration set, Account-level suppression list, 2048-bit DKIM keys, and more.



Amazon Simple Email Service

Amazon Simple Email Service enables you to send and receive email using a reliable and scalable email platform.

Read the documentation.



Manage Identities

Verify email addresses and domains, send a test email, and configure email-sending settings.



Monitor Email Sending

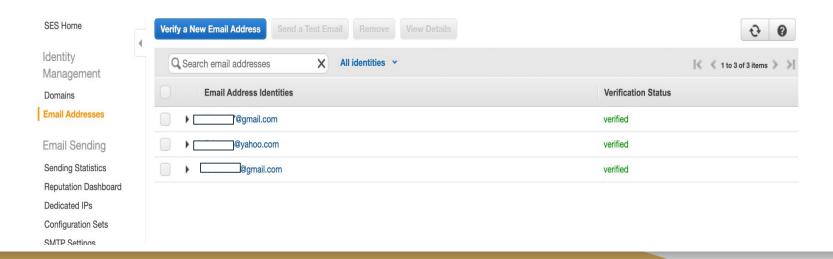
View metrics for bounces, complaints, deliveries, and the number of emails you have sent with respect to your sending limits.



Configure Email Receiving

Set up rules that specify what you want Amazon SES to do with emails it receives on your behalf.

Verify Email Addresses



Amazon Web Services – Email Address Verification Request in region US East (N. Virginia)







Amazon Web Services <no-reply-aws@amazon.com>

Mon, Jan 3, 12:57 AM (1 day ago)





to me 🔻

Dear Amazon Web Services Customer,

We have received a request to authorize this email address for use with Amazon SES and Amazon Pinpoint in region US East (N. Virginia). If you requested this verification, please go to the following URL to confirm that you are authorized to use this email address:

https://email-verification.us-east-1.amazonaws.com/?Context=487876667982&X-Amz-Date=20220103T055711Z&Identity_Identity_Name=rinaweiner%40gmail.com&X-Amz-Algorithm=AWS4-HMAC-SHA256&Identity_Identity_Type=EmailAddress&X-Amz-SignedHeaders=host&X-Amz-Credential=AKIAVM67ZIEFRDECB3HF%2F2
0220103%2Fus-east-1%2Fses%2Faws4_request&Operation=ConfirmVerification&Namespace=Bacon&X-Amz-Signature=66f5bbefc9f20390
b01391907521eedc87da32fb55825a0832c188935a06da3c

Your request will not be processed unless you confirm the address using this URL. This link expires 24 hours after your original verification request.

If you did NOT request to verify this email address, do not click on the link. Please note that many times, the situation isn't a phishing attempt, but either a misunderstanding of how to use our service, or someone setting up email-sending capabilities on your behalf as part of a legitimate service, but without having fully communicated the procedure first. If you are still concerned, please forward this notification to aws-email-domain-verification@amazon.com and let us know in the forward that you did not request the verification.

To learn more about sending email from Amazon Web Services, please refer to the Amazon SES Developer Guide at http://docs.aws.amazon.com/ses/latest/DeveloperGuide/Welcome.html and Amazon Pinpoint Developer Guide at http://docs.aws.amazon.com/pinpoint/latest/userguide/welcome.html.

AWS Notification - Subscription Confirmation > Inbox x







MyNews <no-reply@sns.amazonaws.com>

Mon, Jan 3, 9:13 AM (1 day ago)





to me *

You have chosen to subscribe to the topic:

arn:aws:sns:us-east-1:487876667982:NewsEmail

To confirm this subscription, click or visit the link below (If this was in error no action is necessary):

Confirm subscription

Please do not reply directly to this email. If you wish to remove yourself from receiving all future SNS subscription confirmation requests please send an email to sns-opt-out



[Case 9433100911] New correspondence added >>









Amazon Web Services <no-reply-aws@amazon.com>

Mon, Jan 3, 1:13 AM (1 day ago)



to me *

Hello,

Thank you for submitting your request to increase your sending limits. We are unable to grant your request at this time because we do not have enough information about your use case.

If you can provide additional information about how you plan to use Amazon SES, we may be able to grant your request. In your response, include as much detail as you can about your email-sending processes and procedures.

For example, tell us how often you send email, how you maintain your recipient lists, and how you manage bounces, complaints, and unsubscribe requests. It is also helpful to provide examples of the email you plan to send so we can ensure that you are sending high-quality content.

You can provide this information by replying to the correspondence, in the console link below. Our team provides an initial response to your request within 24 hours. If we're able to do so, we'll grant your request within this 24-hour period. However, if we need to obtain additional information from you, it might take longer to resolve your request.

Thank you for contacting Amazon Web Services.

To contact us again about this case, please return to the AWS Support Center using the following URL:

https://console.aws.amazon.com/support/home?#/case/?caseId=9433100911&displayId=9433100911&language=en

Hello from Amazon SNS > Inbox ×









MyNews <no-reply@sns.amazonaws.com>

Mon, Jan 3, 9:18 AM (1 day ago)





to me ▼

Publishing a message to an SNS topic.

If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe:

https://sns.us-east-1.amazonaws.com/unsubscribe.html?SubscriptionArn=arn:aws:sns:us-east-1:487876667982:NewsEmail:45c63974-7d15-470e-b7be-

22c3f860617e&Endpoint=

Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at https://aws.amazon.com/support











to me *

Amazon Web Services has opened case 9433100911 on your behalf.

Amazon Web Services <no-reply-aws@amazon.com>

The details of the case are as follows:

Case ID: 9433100911

Subject: SES: Production Access

Severity: Low

Correspondence: Production access request

Service: SES Sending Limits

Region: us-east-1

Please enable production access

Use case description: School Project

Mail Type: TRANSACTIONAL

Website URL: https://www.dummyschoolproject.com

To contact us again about this issue, please use the following link to enter your correspondence or attach any files you think would be useful:

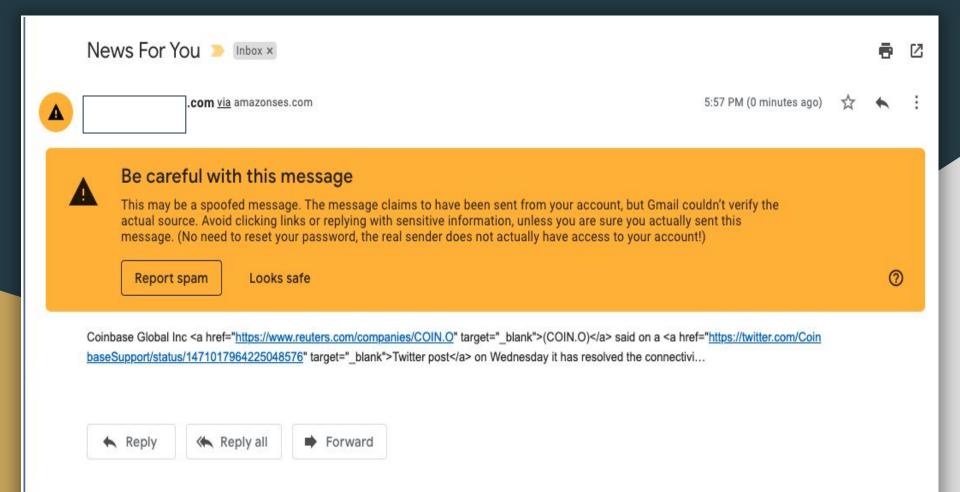
https://console.aws.amazon.com/support/home?#/case/?caseId=9433100911&displayId=9433100911&language=en

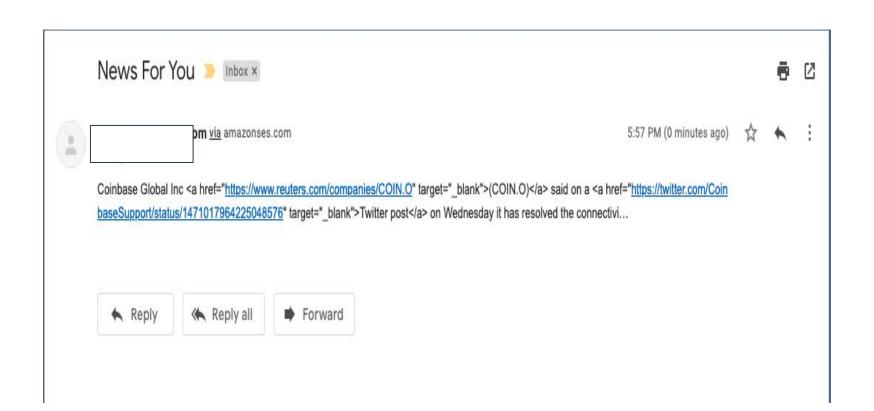
(If you will connect by federation, log in before following the link.)

Sincerely,

The Amazon Web Services Team

*Please note: this e-mail was sent from an address that cannot accept incoming e-mail. Please use the appropriate link above if you need to contact us again about this eama jeeua





Challenges and Potential Developments

- Free trial of Openai's model only gave up to \$18.00 work performed by the model. Andrew hit this limit day 1 of the project!
- Bryan limited his usage and figured out how to get the results we needed.
- The overall weighted sentiment value could be tested as a signal in a stock trading program
- Further development is needed to set up an automated email system that would deliver summarized news into your inbox depending on the sentiment analysis.