

In [2]:

```
1 import boto3
2 from botocore.exceptions import ClientError
3
4 def send_email():
5     SENDER = "youremail@gmail.com" # must be verified in AWS SES Email
6     RECIPIENT = "youremail@gmail.com" # must be verified in AWS SES Email
7
8     # If necessary, replace us-west-2 with the AWS Region you're using
9     AWS_REGION = "us-east-1"
10
11     # The subject line for the email.
12     SUBJECT = "This is test email for testing purpose..!!"
13
14     # The email body for recipients with non-HTML email clients.
15     BODY_TEXT = ("Hey Hi...\r\n"
16                 "This email was sent with Amazon SES using the "
17                 "AWS SDK for Python (Boto)."
18                 )
19
20     # The HTML body of the email.
21     BODY_HTML = """<html>
22         <head></head>
23         <body>
24             <h1>Hey Hi...</h1>
25             <p>This email was sent with
26                 <a href='https://aws.amazon.com/ses/'>Amazon SES CQPOCS</a> us:
27                 <a href='https://aws.amazon.com/sdk-for-python/'>
28                     AWS SDK for Python (Boto)</a>.</p>
29         </body>
30     </html>
31     """
32
33     # The character encoding for the email.
34     CHARSET = "UTF-8"
35
36     # Create a new SES resource and specify a region.
37     client = boto3.client('ses',region_name=AWS_REGION)
38
39     # Try to send the email.
40     try:
41         #Provide the contents of the email.
42         response = client.send_email(
43             Destination={
44                 'ToAddresses': [
45                     RECIPIENT,
46                 ],
47             },
48             Message={
49                 'Body': {
50                     'Html': {
51                         'Data': BODY_HTML
52                     },
53                     'Text': {
54                         'Data': BODY_TEXT
55                     },
56                 },
57             },
58             'Subject': {
59                 'Data': SUBJECT
60             }
61         )
62     except ClientError as e:
63         print(e.response['Error']['Message'])
64
65     else:
66         print("Email sent! Message ID:"),
67         print(response['MessageId'])
```

```

62         },
63     },
64     Source=SENDER
65   )
66   # Display an error if something goes wrong.
67   except ClientError as e:
68     print(e.response['Error']['Message'])
69   else:
70     print("Email sent! Message ID:"), 
71     print(response['MessageId'])
72 
73 def lambda_handler(event, context):
74   # TODO implement
75   send_email()
76 
77 print('done')

```

done

The screenshot shows the AWS SES home page. On the left, there's a sidebar with options like 'Account dashboard', 'Reputation metrics', and 'Configuration'. Under 'Configuration', 'Verified identities' is selected. The main content area features a large heading 'Amazon SES' and 'Highly-scalable inbound and outbound email service'. Below this is a brief description of Amazon SES and a 'How it works' section. To the right, there's a 'Pricing' section and a call-to-action button 'Create identity'. A sidebar on the right contains links for 'What is Amazon SES?', 'Getting started with SES', and 'Verifying identities in Amazon SES'.

This screenshot shows the 'Create identity' configuration page. The 'Identity type' section has 'Email address' selected. An input field 'Enter an email address' contains 'vrchinnarathod@gmail.com'. Below the input field is a note about character limits and allowed symbols. A checkbox 'Assign a default configuration set' is present but unchecked. The right side of the screen shows the same sidebar as the previous screenshot.

This screenshot shows the 'Create identity' configuration page with the 'Email address' field populated with 'vrchinnarathod@gmail.com'. The rest of the interface is identical to the previous screenshot, including the sidebar and the right-hand sidebar with SES documentation.

The screenshot shows the first step of the 'Create identity' wizard. It asks for an email address, which is 'vrchinnarathod@gmail.com'. There's a note about character limits and special characters. A checkbox for 'Assign a default configuration set' is checked, with a note explaining its function. Below is a section for 'Tags' with a 'Add new tag' button.

This page shows a blue header 'Action required' with the sub-instruction: 'To verify ownership of this identity, check your inbox for a verification request email and click the link provided.' Below is a summary for the identity 'vrchinnarathod@gmail.com'. It includes sections for 'Identity status' (Unverified), 'Amazon Resource Name (ARN)' (arn:aws:ses:us-east-1:357171621133:identity/vrchinnarathod@gmail.com), and 'AWS Region' (US East (N. Virginia)). At the bottom, there are tabs for 'MAIL FROM domain', 'Notifications' (selected), 'Authorization', 'Configuration set', and 'Tags'.

This screenshot shows the 'Email templates' page. It has a sidebar with 'Configuration' selected, under 'Email templates'. The main area displays a table with one row: 'All templates (0)'. A search bar at the top of the table allows for finding specific email templates.

The screenshot shows the AWS SES Configuration: Verified identities page. The left sidebar has 'Verified identities' selected under 'Configuration'. The main area displays a table titled 'Identities (1)'. A single row is present with the email address 'vrchinnarathod@gmail.com' listed as an 'Email address' in the 'Identity' column. The status is marked as 'Unverified' with a small icon. Buttons for 'Send test email', 'Delete', and 'Create Identity' are visible at the top right of the table.

The screenshot shows an email in the Gmail inbox from 'Amazon Web Services <no-reply-aws@amazon.com>' to the user. The subject is 'Amazon Web Services – Email Address Verification Request in region US East (N. Virginia)'. The email body contains a message about a verification request and provides a URL for confirmation: [https://email-verification.us-east-1.amazonaws.com/?Context=357171621133&X-Amz-Date=20220116T151418Z&Identity.IdentityName=vrchinnarathod%40gmail.com&X-Amz-Algorithm=AWS4-HMAC-SHA256&Identity.IdentityType=EmailAddress&X-Amz-SignedHeaders=host&X-Amz-Credential=AKIAVM672IEFRDECB3HF%2F20220116%2Fses%2Faws_s4_request&Operation=ConfirmVerification&Namespace=Bacon&X-Amz-Signature=4822cde429224188efc96ee4ba018521e20e1cc73475c8ede9da2e55105c9111](https://email-verification.us-east-1.amazonaws.com/?Context=357171621133&X-Amz-Date=20220116T151418Z&Identity.IdentityName=vrchinnarathod%40gmail.com&X-Amz-Algorithm=AWS4-HMAC-SHA256&Identity.IdentityType=EmailAddress&X-Amz-SignedHeaders=host&X-Amz-Credential=AKIAVM672IEFRDECB3HF%2F20220116%2Fus-east-1%2Fses%2Faws_s4_request&Operation=ConfirmVerification&Namespace=Bacon&X-Amz-Signature=4822cde429224188efc96ee4ba018521e20e1cc73475c8ede9da2e55105c9111). It also includes a note: 'Your request will not be processed unless you confirm the address using this URL. This link expires 24 hours after your original request.'

The screenshot shows the 'Verify Success' page from the AWS SES service. The title is 'Send Email Using AWS SES service With Python AWS Lambda'. The main message says 'Congratulations!' and states: 'You have successfully verified an email address. You can now start sending email from this address.' It provides instructions for new users: 'For new Amazon SES users—If you have not yet applied for a sending limit increase, then you are still in the sandbox environment, and you can only send email to addresses that have been verified. To verify a new email address or domain, see the [Identity Management](#) section of the Amazon SES console.' It also mentions for new Amazon Pinpoint users: 'For new Amazon Pinpoint users—if you have not yet applied for a sending limit increase, then you are still in the sandbox environment, and you can only send email to addresses that have been verified. To verify a new email address or domain, see the [Settings > Channels](#) page on the Amazon Pinpoint console.' At the bottom, it says 'Thank you for using Amazon Web Services!' and provides a link to 'Go to the Amazon SES detail page.'

Send Email Using AWS SES service With Python AWS Lambda

Amazon SES > Configuration: Verified identities

Identities (1)

Identity	Identity type	Status
vrchinnarathod@gmail.com	Email address	Verified

Create identity

Send Email Using AWS SES service With Python AWS Lambda

Lambda > Functions > Create function

Create function

Choose one of the following options to create your function.

- Author from scratch** (selected) 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

Function name: awsdenoseq

Runtime: Node.js 14.x

Advanced settings

Architecture: x86_64

Permissions

Existing role: ETLLambdaAccessRole

Create function

Send Email Using AWS SES service With Python AWS Lambda

Lambda > Functions > Create function

Create function

Choose a starting point for your new function.

- Author from scratch - Hello World examples include just enough code for your chosen language to get started. You can add triggers and configure additional settings after the function is created.**
- Use a blueprint - Blueprints are language-specific samples that include function code and settings for a runtime and environment.**

Basic information

Function name: awsdenoseq

Runtime: Node.js

Advanced settings

Architecture: x86_64

Permissions

Existing role: ETLLambdaAccessRole

Create function

The screenshot shows the AWS Lambda function configuration interface. The left sidebar lists the environment variables and the function's code source. The main area displays the code for the `lambda_function` under the `awsdemoesemal` layer. The code is as follows:

```
1 import boto3
2 from botocore.exceptions import ClientError
3
4 def send_email():
5     SENDER = "vrchinnarathod@gmail.com"
6     RECIPIENT = "vrchinnarathod@gmail.com"
7
8     # If necessary, replace us-west-2 with the AWS Region you're using for Amazon SES.
9     AWS_REGION = "us-west-1"
10
11     # The subject line for the email.
12     SUBJECT = "This is test email for testing purpose..!!"
13
14     # The email body for recipients with non-HTML email clients.
15     BODY_TEXT = "Hello,  
This email was sent with Amazon SES using the "
16     BODY_HTML = """

This email was sent with Amazon SES using the  
AWS SDK for Python (Boto).

"""
17
18
19     # The HTML body of the email.
20     BODY_HTML = """<html>
21         <head>
22             <body>
23                 <h1>Hello!</h1>
24                 <p>This email was sent with
25                     <a href="https://aws.amazon.com/ses/">Amazon SES</a> using the
26                     <a href="https://aws.amazon.com/sdk-for-python/">
27                         AWS SDK for Python (Boto)</a>.</p>
28             </body>
29         </html>
30     """
31
32     # The character encoding for the email.
33     CHARSET = "UTF-8"
34
```

The right side of the interface contains a sidebar titled "Function configuration on" with sections for triggers, layers, and destinations. It also includes a note about using the function overview to see triggers, layers, and destinations to your function, and a note that Triggers are AWS services or resources that invoke the function.

The screenshot shows the AWS Lambda console interface. On the left, there's a sidebar with tabs for 'Code source', 'Logs', 'Test', 'Monitor', and 'Metrics'. The main area displays a success message: 'Successfully updated the function awsdemosesmail'. A modal window titled 'Configure test event' is open in the center. It contains instructions: '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.' Below this are two radio buttons: 'Create new test event' (selected) and 'Edit saved test events'. An 'Event template' dropdown is set to 'hello-world'. The 'Event name' field has 'Test' typed into it. Below these fields is a JSON editor containing the following event payload:

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

To the right of the modal, there's a vertical sidebar with the title 'Function configuration'. It contains several sections with descriptive text and icons:

- 'Use the function overview to see triggers, layers, and permissions to your function. You can see the following stats of resources in the visualization': An icon of a bar chart.
- 'Triggers are AWS services or resources that invoke the function': An icon of a person icon with a play button.
- 'Destinations are AWS resources that receive a record of an invocation after success or failure. You can configure Lambda to send records to succeed after your function': An icon of a cloud with a checkmark.

At the bottom of the screen, the Windows taskbar is visible with various pinned icons and the system tray showing the date and time as '16-01-2022 20:54'.

The screenshot shows the AWS Lambda function configuration page for the 'awsdemosemail' function. The 'Code' tab is selected, displaying the code source and execution results. The execution results show a successful test run with a status of 'Succeeded', a maximum memory usage of 64 MB, and a duration of 1388.43 ms. The function logs provide detailed information about the request and response. A sidebar on the right titled 'Function configuration' contains an overview of triggers, layers, and destinations. The bottom of the screen shows the AWS navigation bar and the status bar indicating the current time as 21:53 / 22:53.

In []:

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