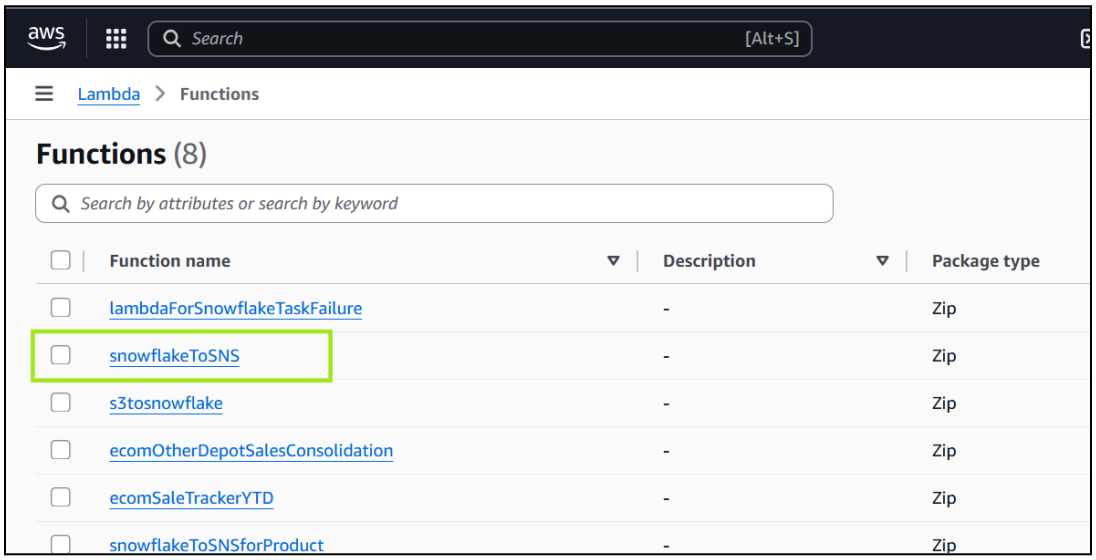
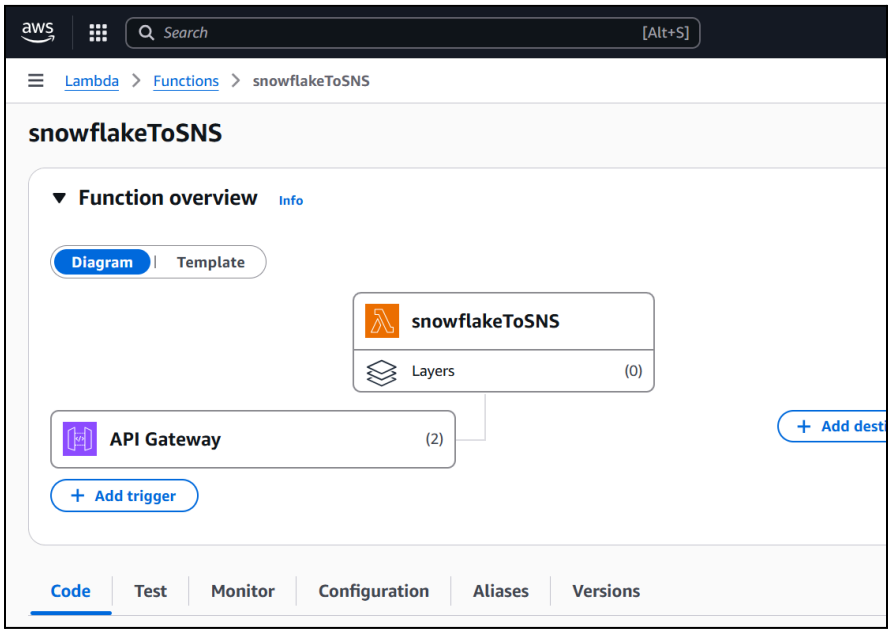
Snowflake to SNS Notification Pipeline

Distributor & Product Addition

AWS Set-up:

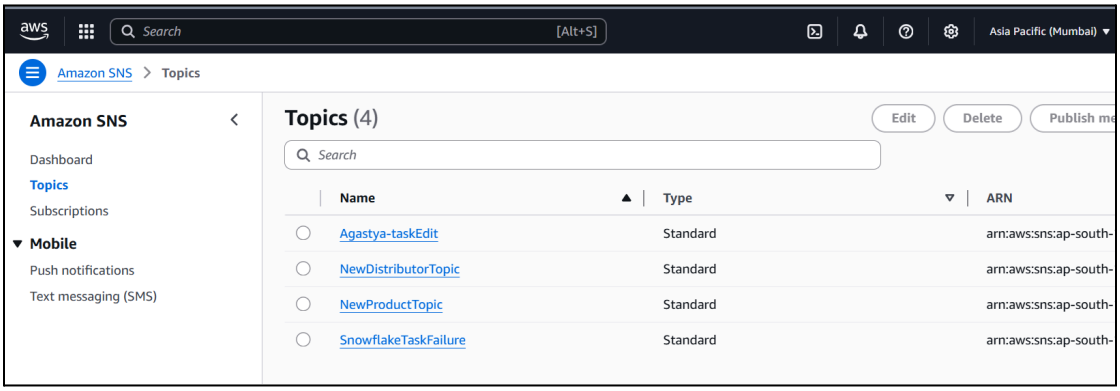
- Navigate to AWS Lambda Console. Function name: '**snowflakeToSNS**'.



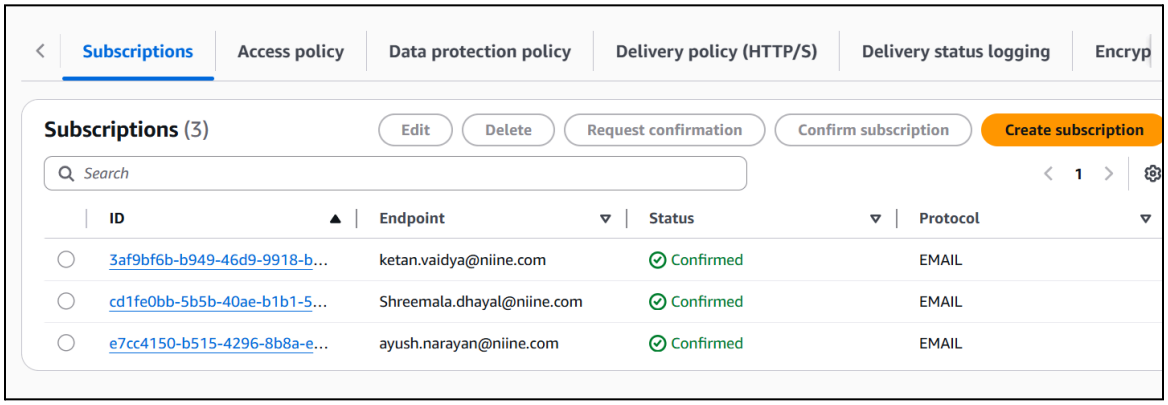


This function contains python code in the default code editor. The purpose of the code/lambda function is to receive messages from snowflake external function (mentioned later in this document), parse it and forward it to AWS SNS topic (in next step).

- Open the AWS SNS console. Go to topic '*NewDistributorTopic*' or '*NewProductTopic*'

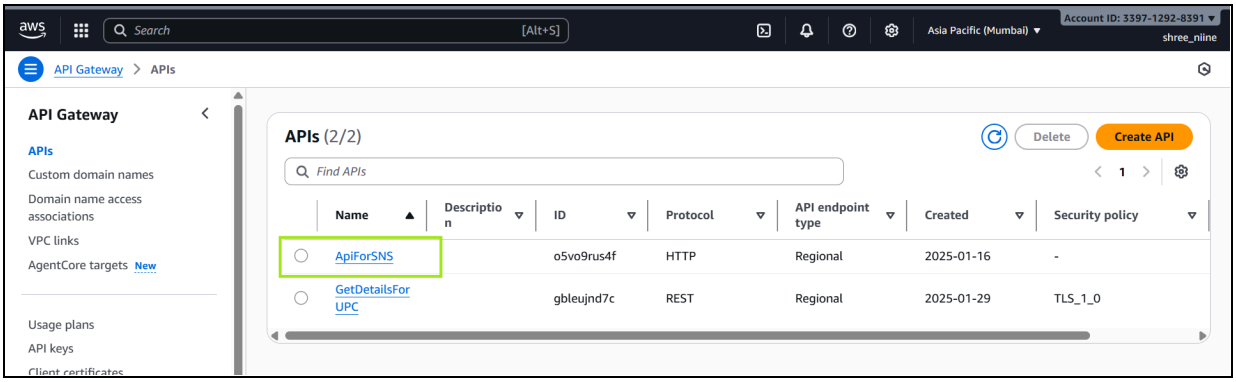


This topic is of type: "*Standard*" (not FIFO), everything else is default. Subscriptions are created which are subscribed to this topic. Below are the subscriptions (of type Email) which are subscribed to this topic:

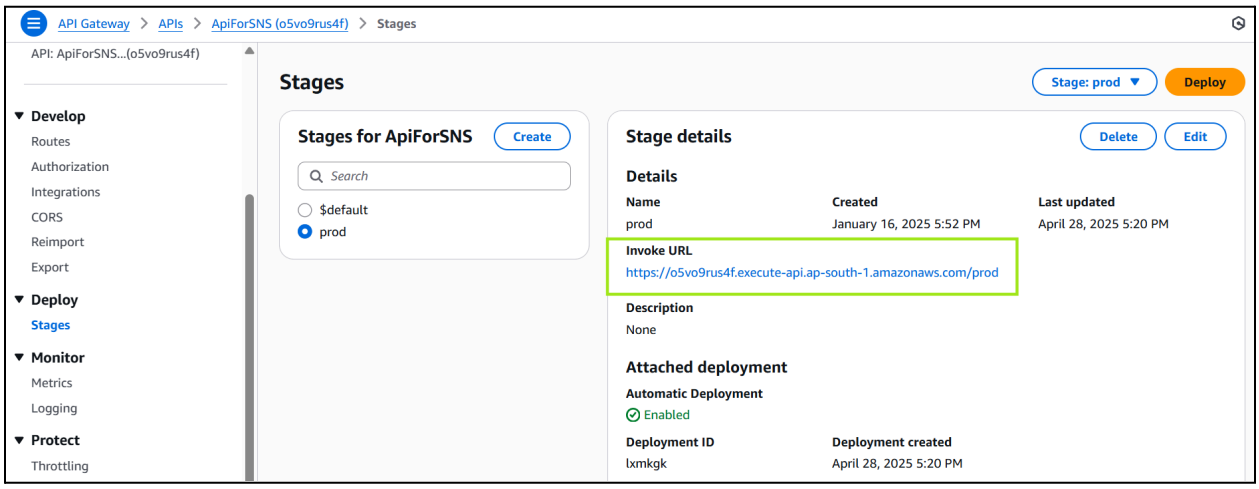


All the subscribed people will receive the mail when the pipeline is triggered from snowflake.

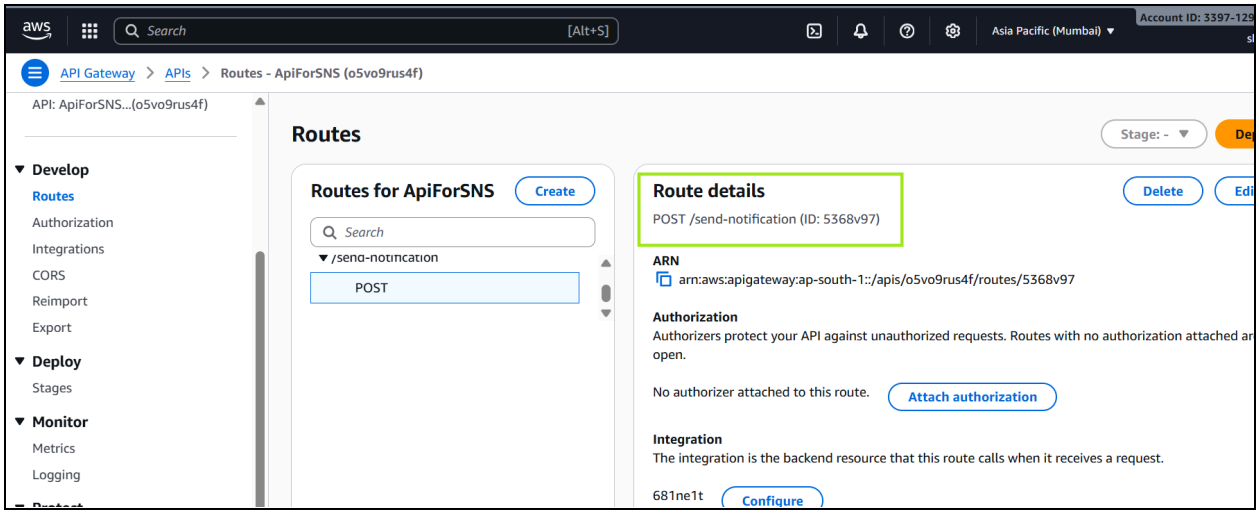
- Now navigate to AWS API Gateway console, specifically to '*ApiForSNS*' API.



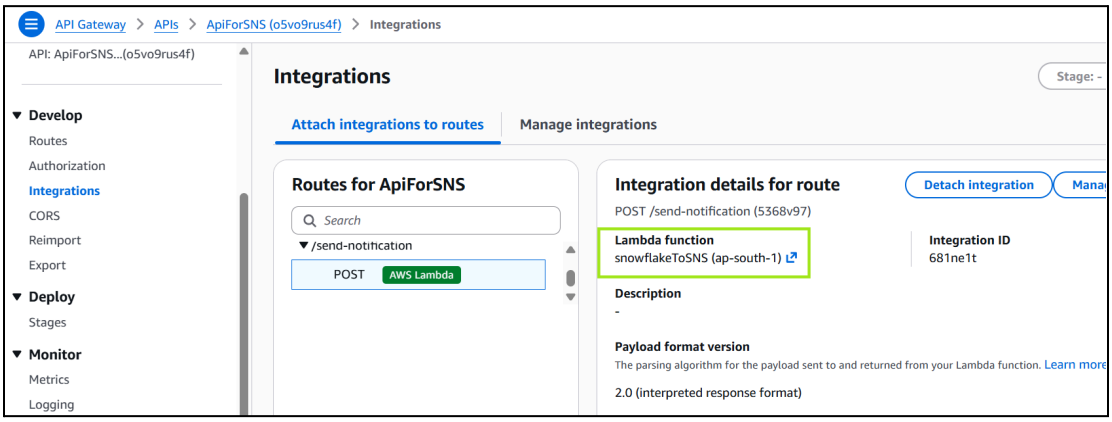
Go to the “Stages” section, stage is where the base url is present.



Then in the routes section, further url and API method (POST) is defined.



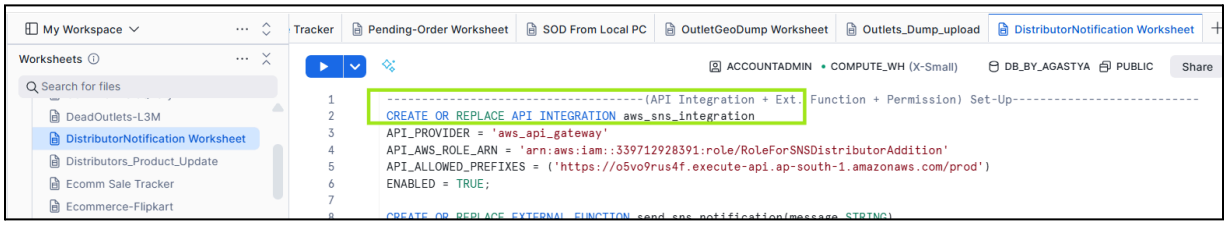
After routes, integration is attached to the route, which in this case is Lambda integration (the '**snowflakeToSNS**' lambda function in above steps). When a request is made to the complete url of this API (*https://o5vo9rus4f.execute-api.ap-south-1.amazonaws.com/prod/send-notification*), it will call the attached lambda function.



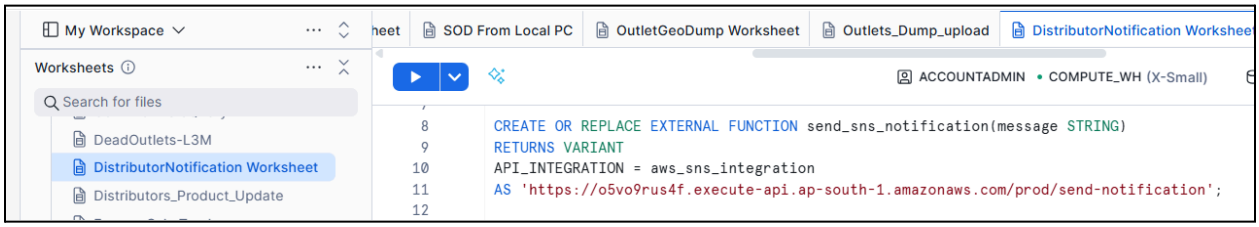
AWS Set-up is complete, now snowflake needs to be configured to be able to call '**snowflakeToSNS**' lambda function so that it can forward the message from snowflake to subscribed users of SNS Topic.

Snowflake Set-up:

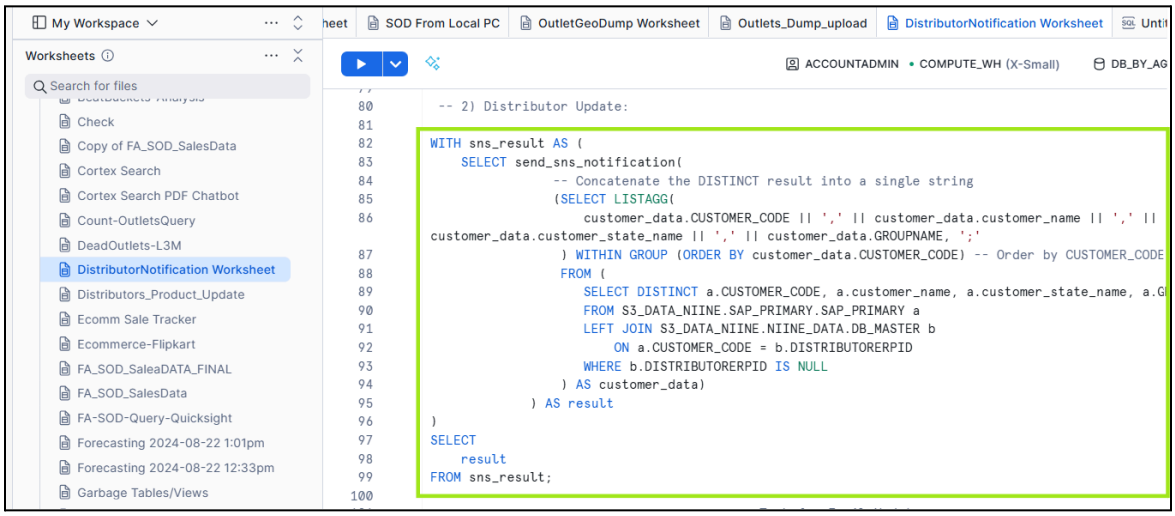
- API Integration is created with API provider as *aws_api_gateway* and base url of our API as allowed prefix. Follow this documentation.



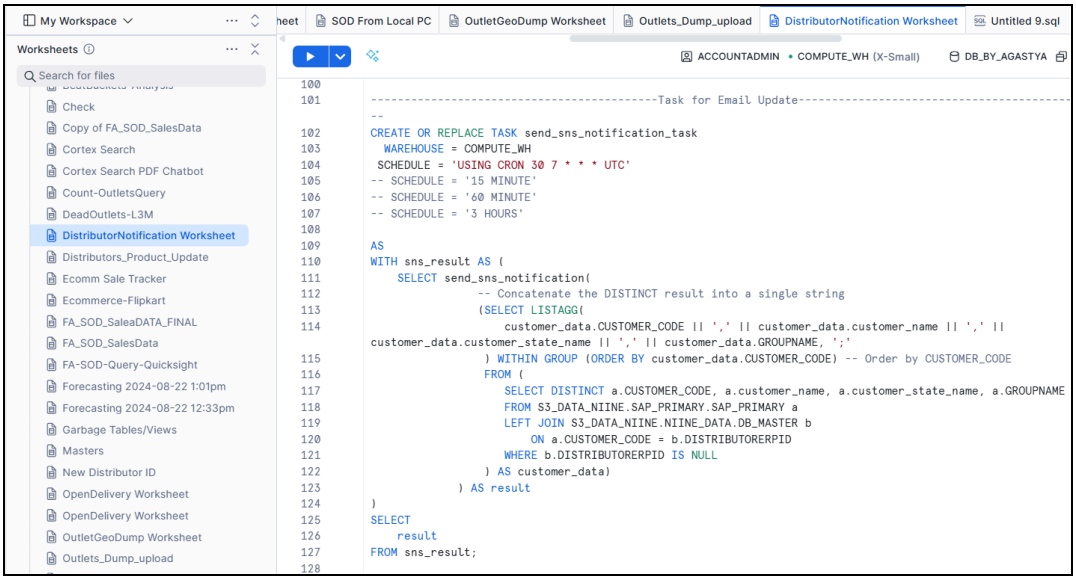
- External function is then created with String type parameter and complete url of our AWS API route.



- Snowflake query is written as such that it executes the above function and the query for new distributor addition is passed as parameter to the function.



- Snowflake task is then created for this query to be executed at a specific schedule.



For pipeline flow, view the “Snowflake to SNS Pipeline.drawio” diagram.

– By Agastya Singh