AWS DEVOPS BASICS WITH RE:POST

AWS Lambda

Lambda Basic

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AWS Korea

Agenda

- Serverless Architecture
- AWS Lambda
- Workshop

What is Serverless?

Conventional Deployment and Operations

- Configure an Instance
- Update OS
- Install App Platform
- Build and deploy apps
- Configure automatic scaling and load balancing
- Continuously secure and monitor instances
- Monitor and maintain apps

Serverless Deployment and Operations

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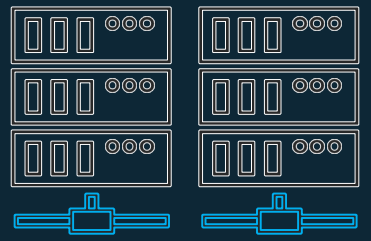
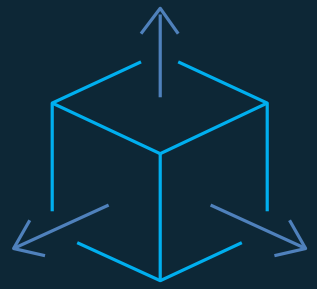
What is Serverless?



No server or container management



Flexible scaling

High availability

No idle capacity

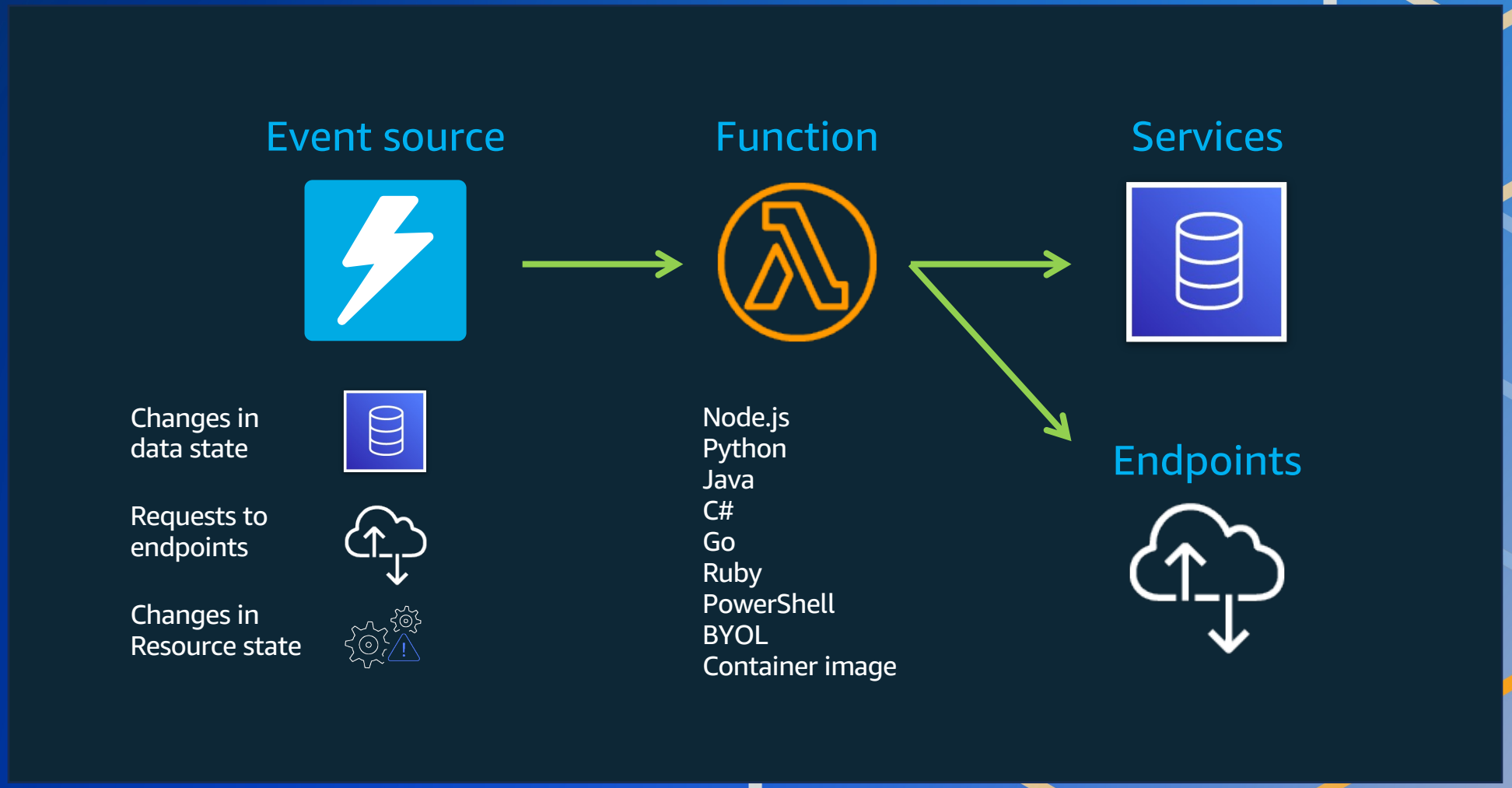
What is AWS Lambda?

AWS Lambda

- No servers to manage
- Continuous scaling
- Cost optimized with 1ms metering
- Consistent performance at scale
- “Always Free“ 1 million req/month

Free Tier
1M requests and 400,000 GBs of compute.
Every month, every customer.

Serverless Applications



Lambda Handler

Handler() function

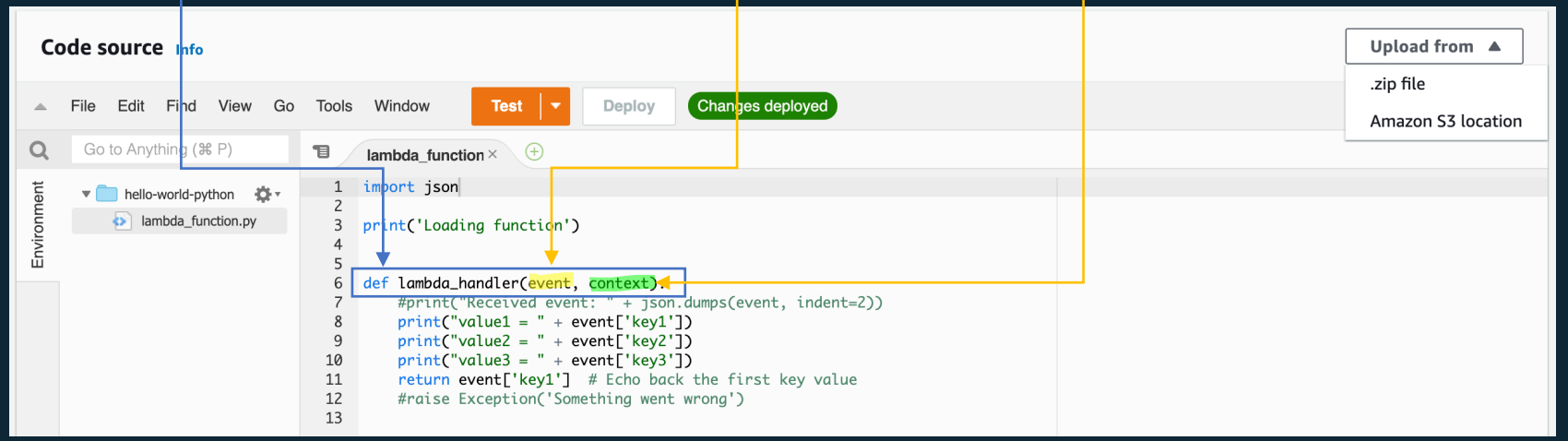
Function to be executed upon invocation

Event object

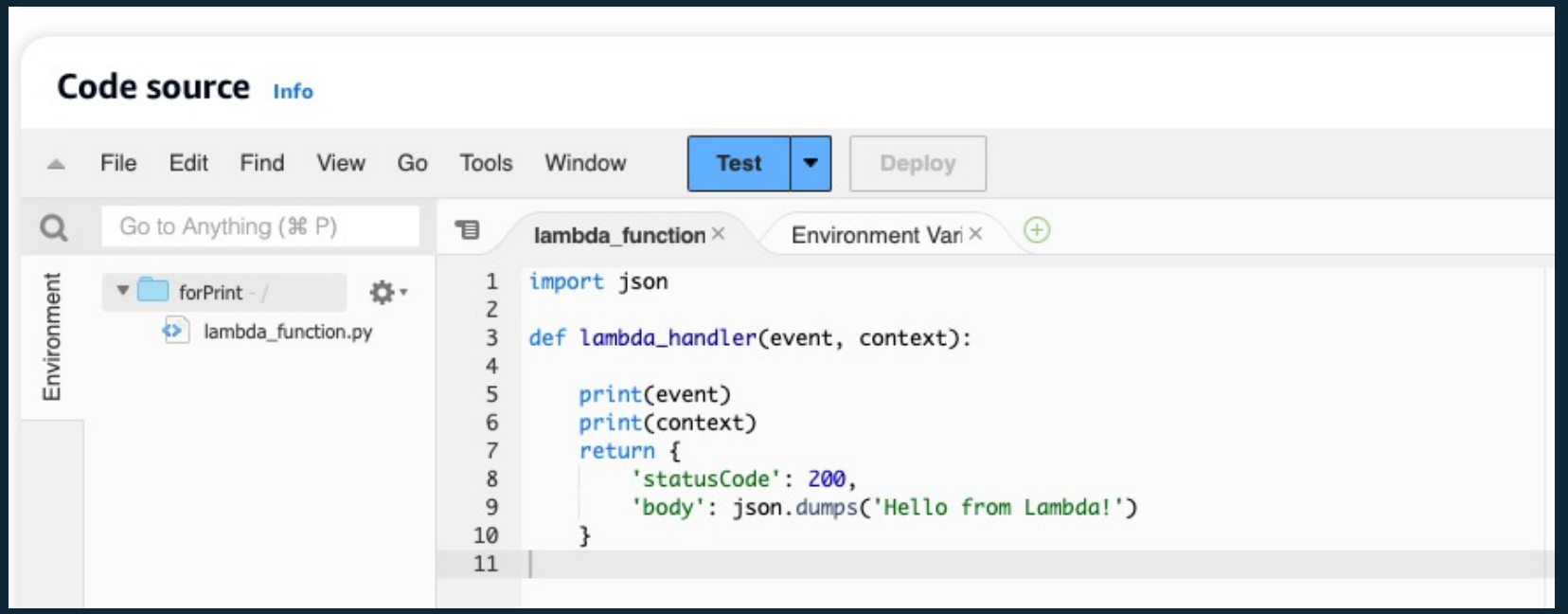
Data sent during Lambda function Invocation

Context object

Methods and properties about the invocation, function, and execution environment



Lambda Log



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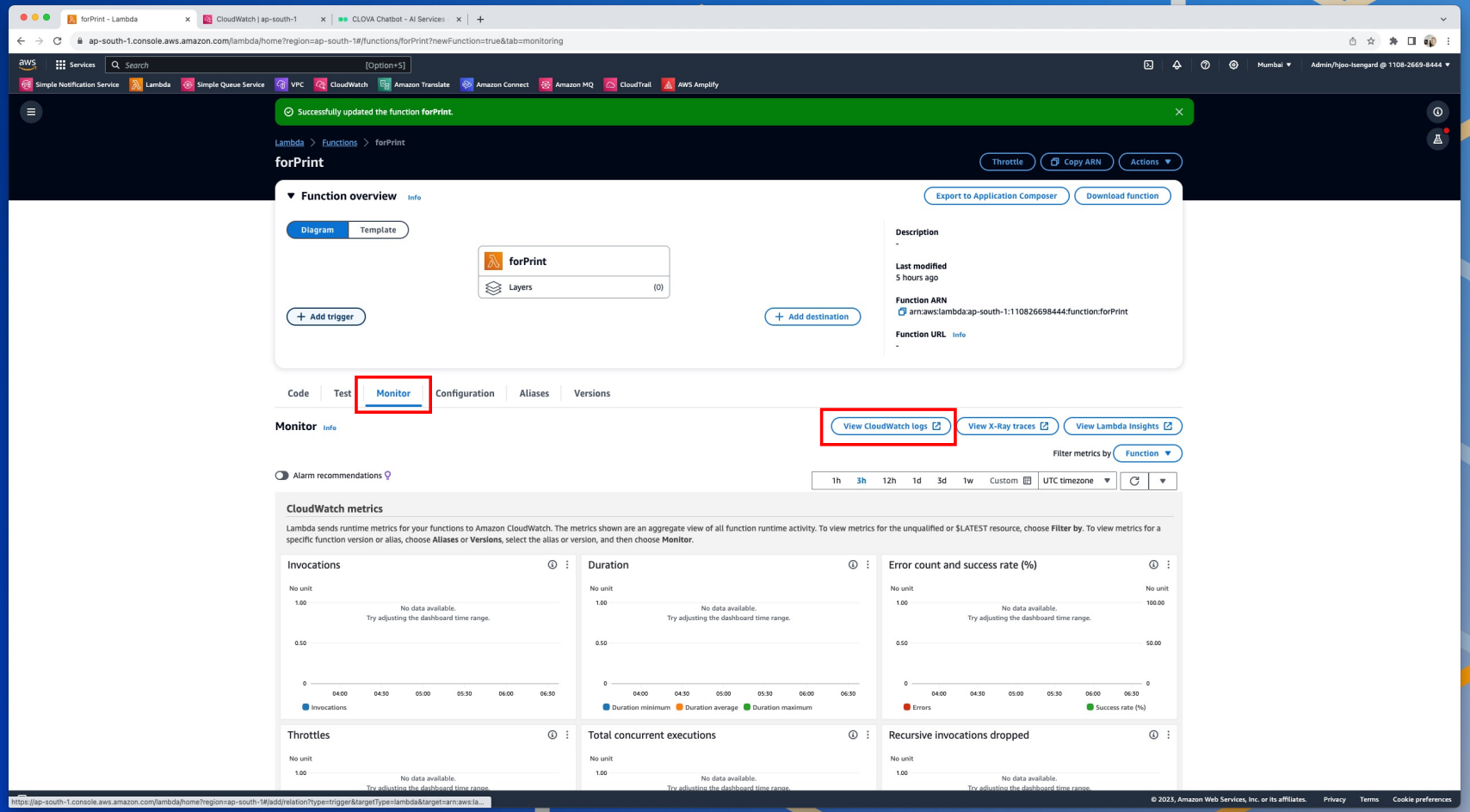

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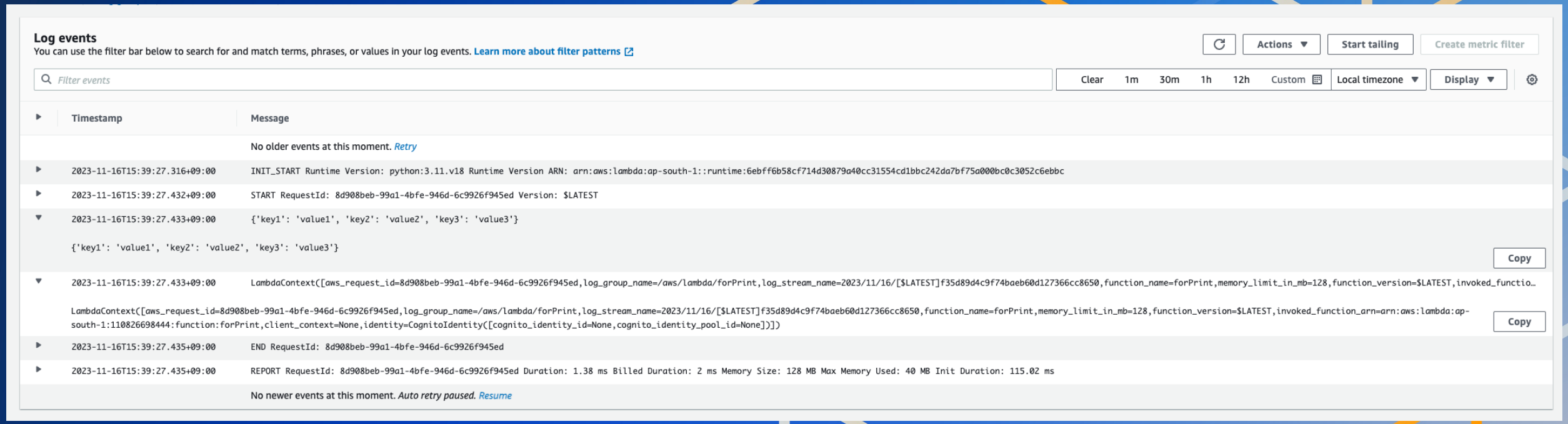


Log events
You can use the filter bar below to search for and match terms, phrases, or values in your log events. Learn more about filter patterns

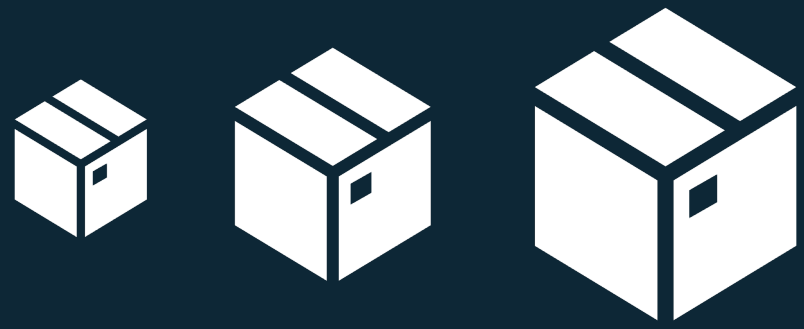
Actions | Start tailing | Create metric filter

Filter events | Clear | 1m | 30m | 1h | 12h | Custom | Local timezone | Display

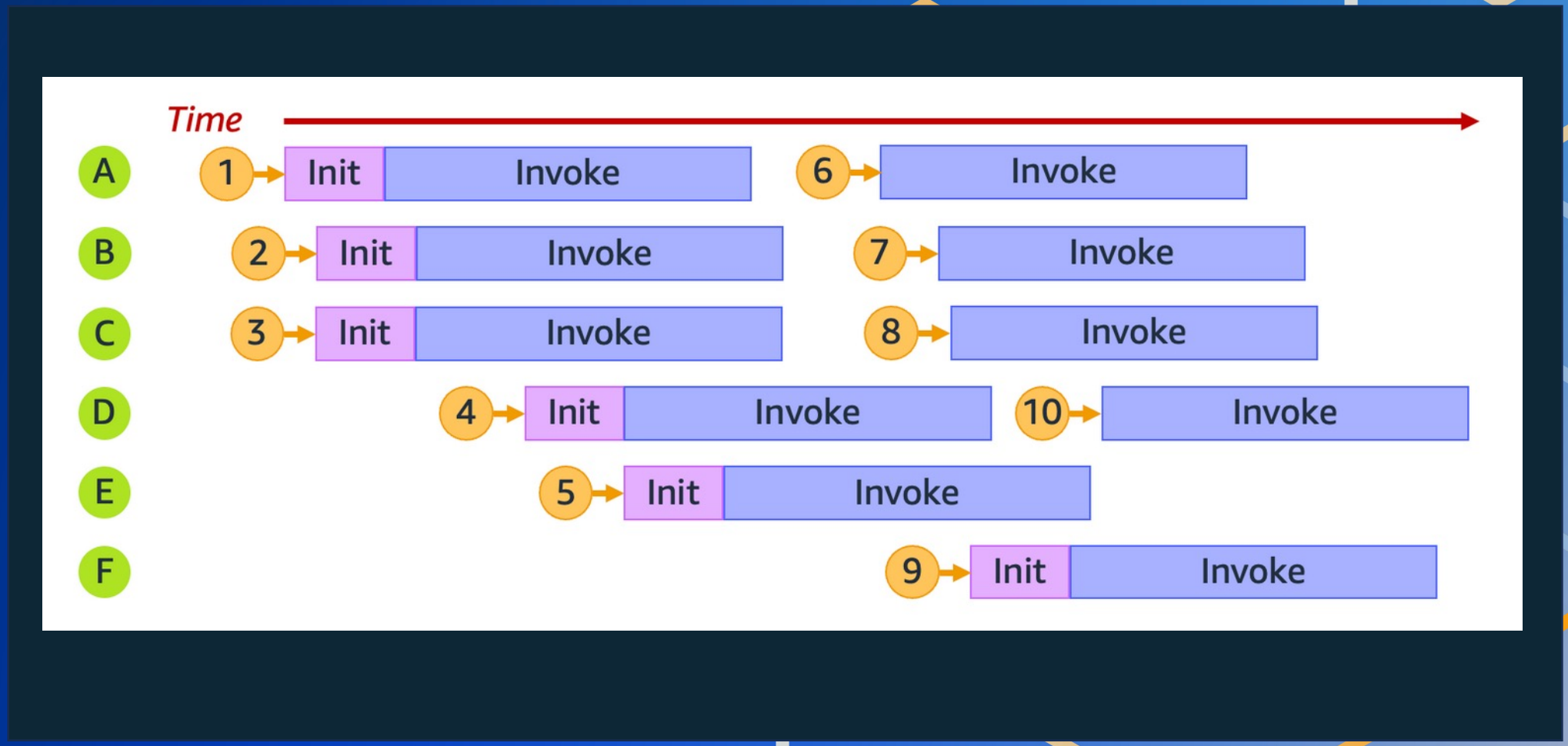
Timestamp	Message
	No older events at this moment. *Retry*
2023-11-16T15:39:27.316+09:00	INIT_START Runtime Version: python:3.11.v18 Runtime Version ARN: arn:aws:lambda:ap-south-1::runtime:6ebff6b58cf714d30879a40cc31554cd1bbc242da7bf75a000bc0c3052c6ebbc
2023-11-16T15:39:27.432+09:00	START RequestId: 8d908beb-99a1-4bfe-946d-6c9926f945ed Version: $LATEST
2023-11-16T15:39:27.433+09:00	{'key1': 'value1', 'key2': 'value2', 'key3': 'value3'}
	{'key1': 'value1', 'key2': 'value2', 'key3': 'value3'} Copy
2023-11-16T15:39:27.433+09:00	LambdaContext([aws_request_id=8d908beb-99a1-4bfe-946d-6c9926f945ed,log_group_name=/aws/lambda/forPrint,log_stream_name=2023/11/16/[$LATEST]f35d89d4c9f74baeb60d127366cc8650,function_name=forPrint,memory_limit_in_mb=128,function_version=$LATEST,invoked_functio…
	LambdaContext([aws_request_id=8d908beb-99a1-4bfe-946d-6c9926f945ed,log_group_name=/aws/lambda/forPrint,log_stream_name=2023/11/16/[$LATEST]f35d89d4c9f74baeb60d127366cc8650,function_name=forPrint,memory_limit_in_mb=128,function_version=$LATEST,invoked_function_arn=arn:aws:lambda:ap-south-1:110826698444:function:forPrint,client_context=None,identity=CognitoIdentity([cognito_identity_id=None,cognito_identity_pool_id=None])]) Copy
2023-11-16T15:39:27.435+09:00	END RequestId: 8d908beb-99a1-4bfe-946d-6c9926f945ed
2023-11-16T15:39:27.435+09:00	REPORT RequestId: 8d908beb-99a1-4bfe-946d-6c9926f945ed Duration: 1.38 ms Billed Duration: 2 ms Memory Size: 128 MB Max Memory Used: 40 MB Init Duration: 115.02 ms
	No newer events at this moment. *Auto retry paused.* *Resume*

Scaling behavior

- Lambda dynamically scales in response to increased traffic
- Concurrent invocations are the number of invocations of the function code that happen in parallel at any given time
- Estimated concurrency (Capacity) required by the function = Invocations Per Second * Average Invocation Duration In Seconds

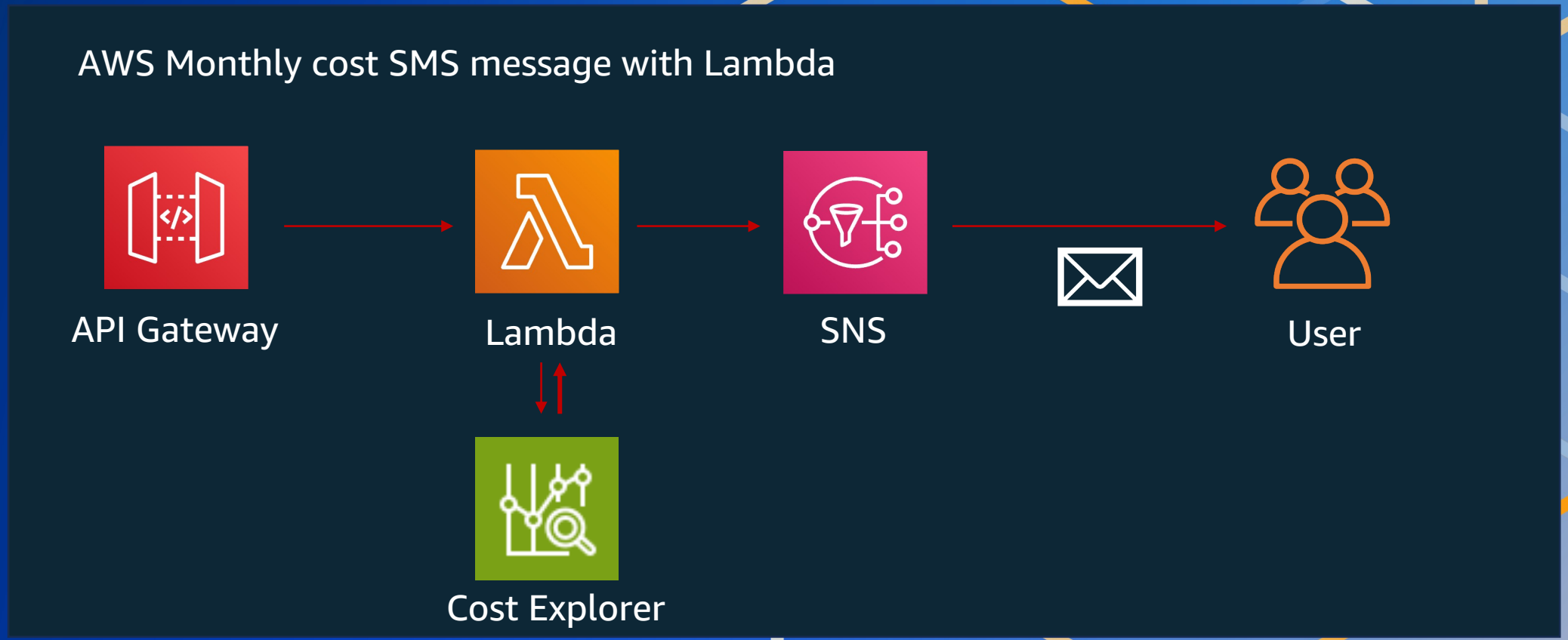


Concurrent Execution



Q&A

Workshop



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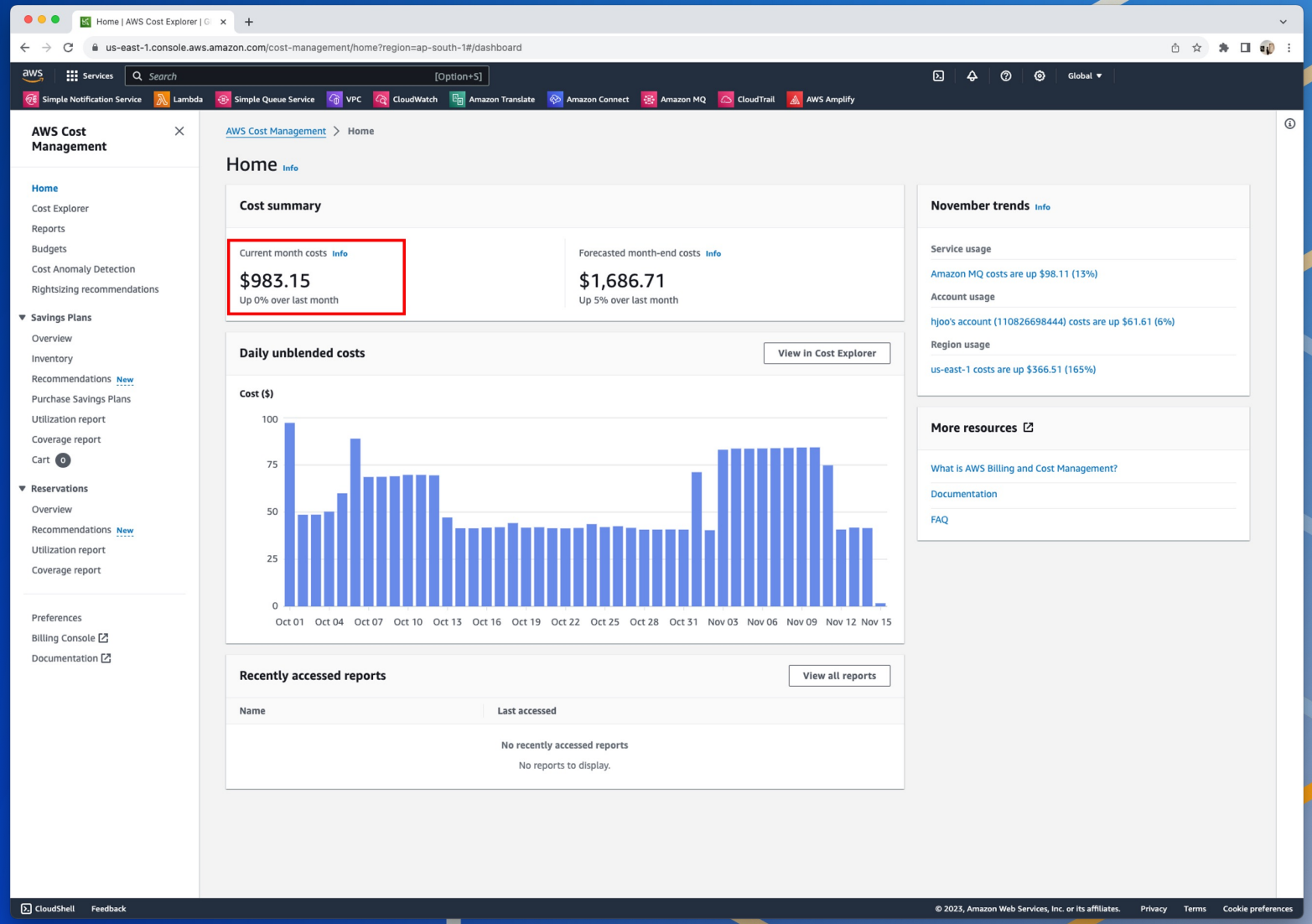

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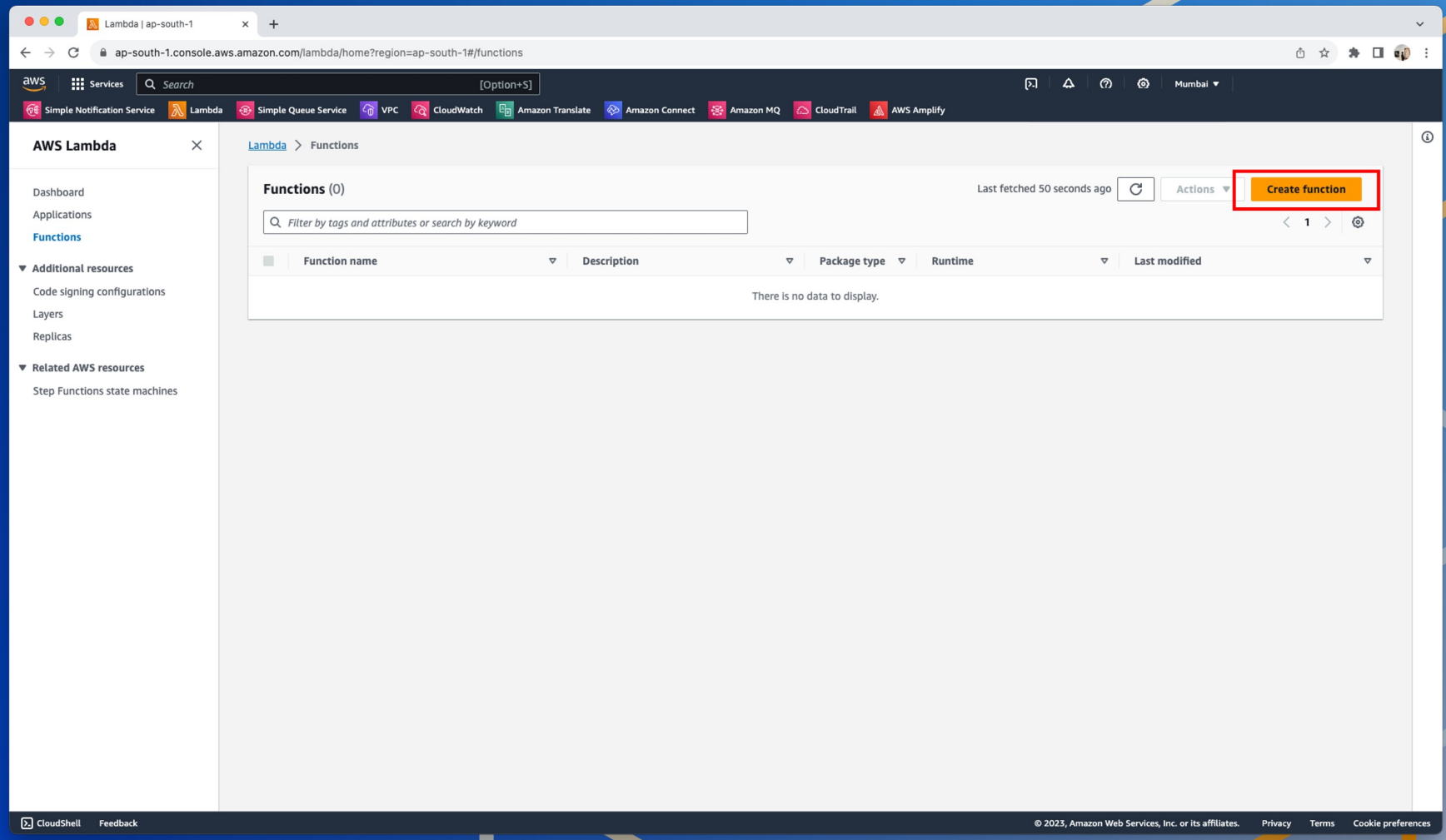

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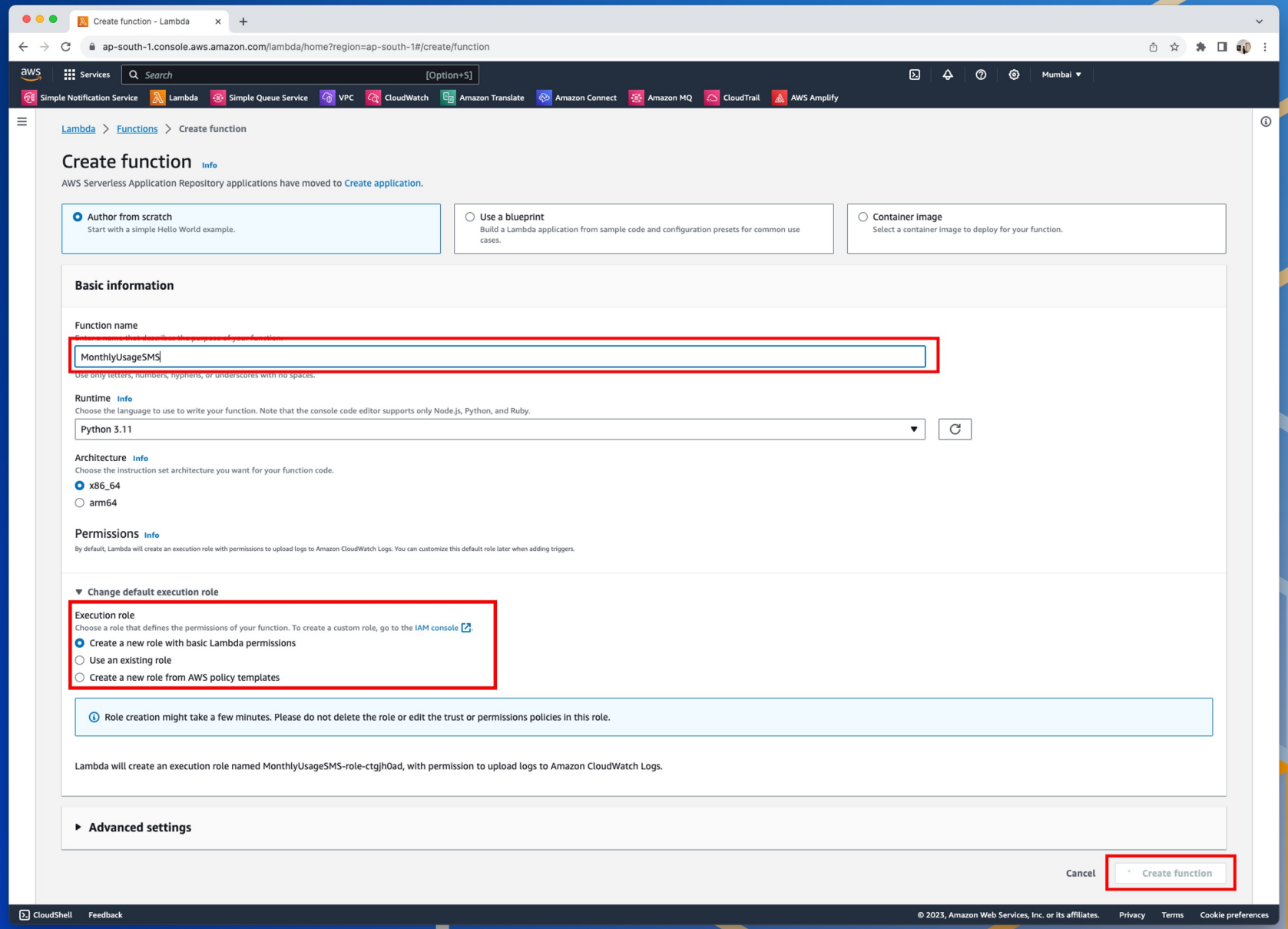

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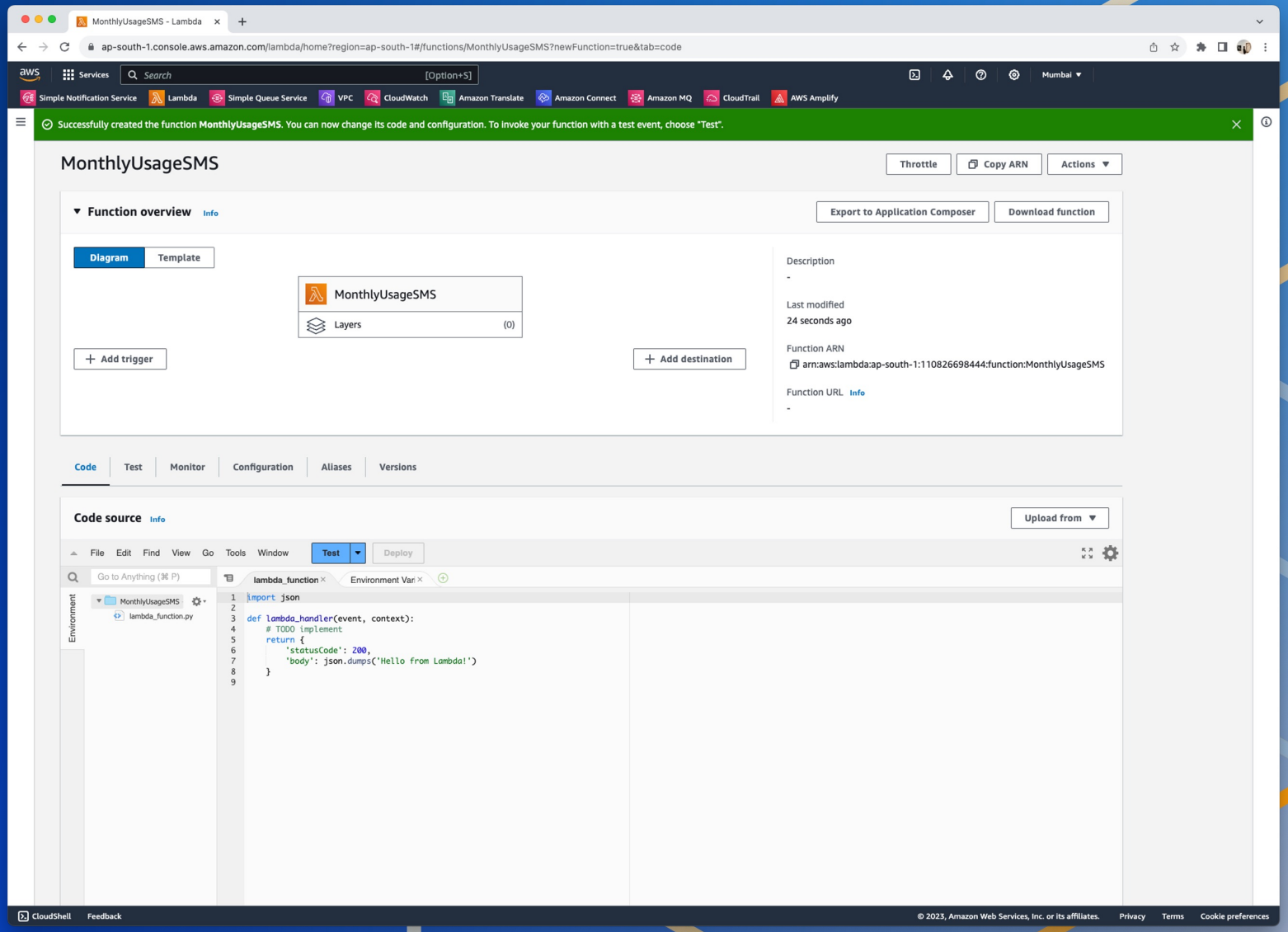

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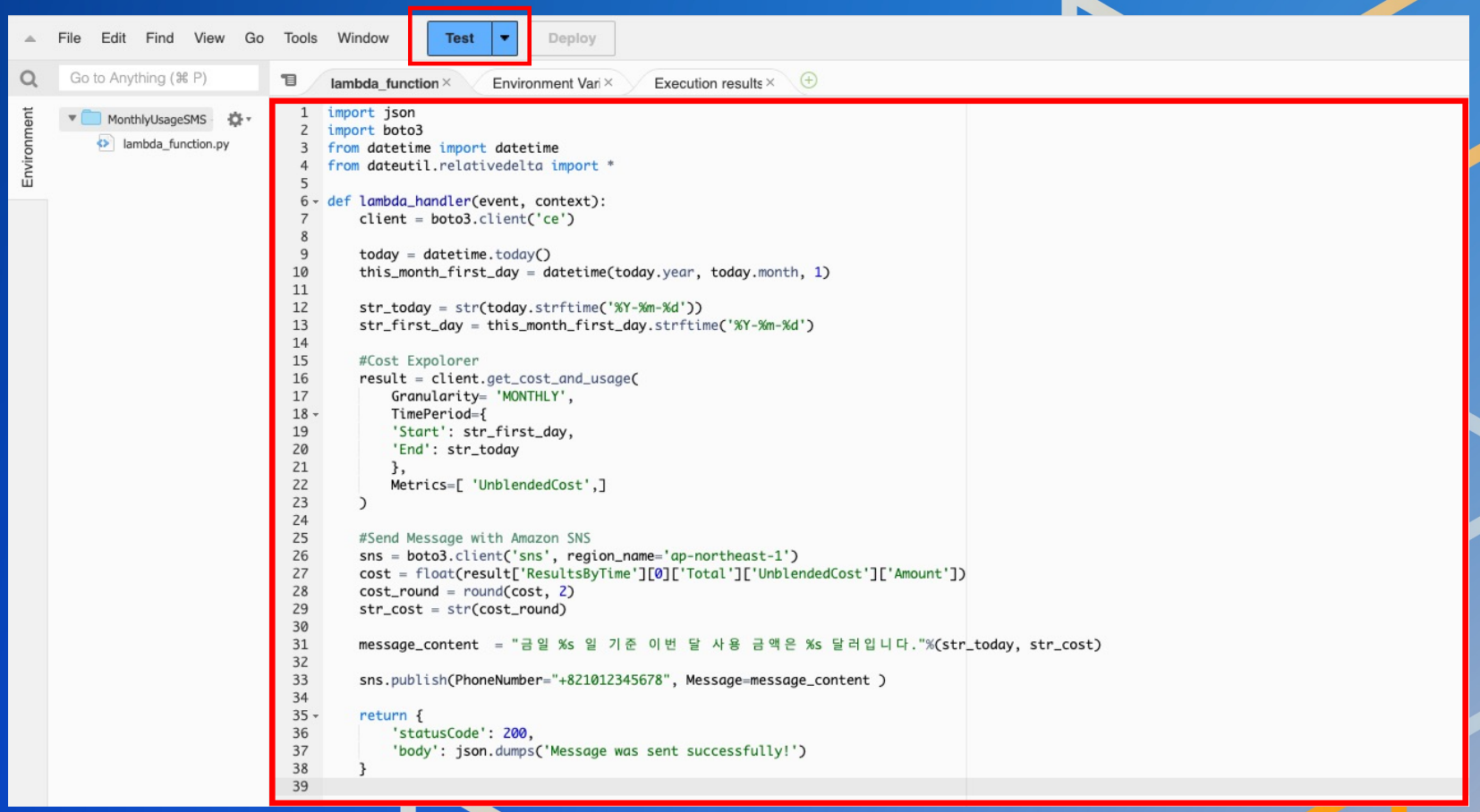

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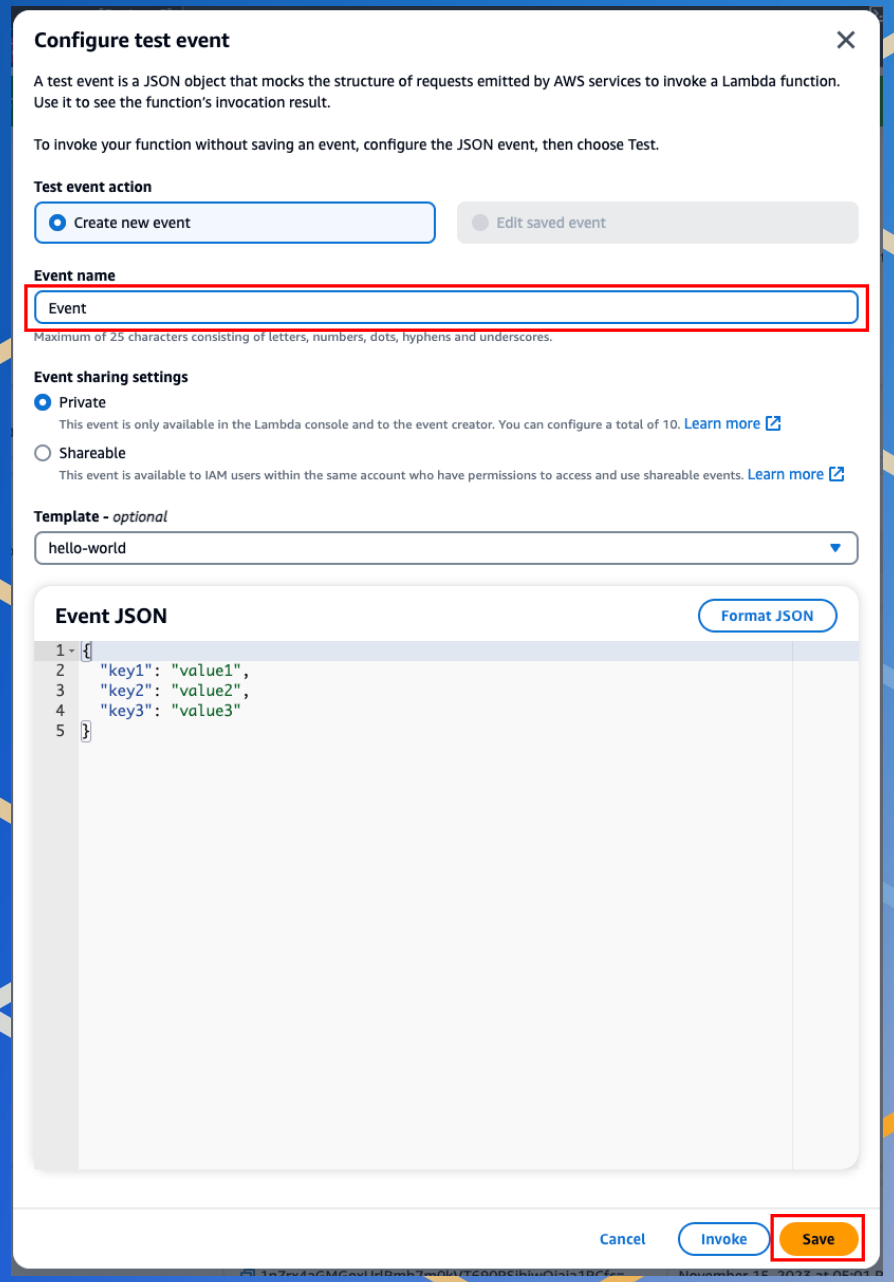

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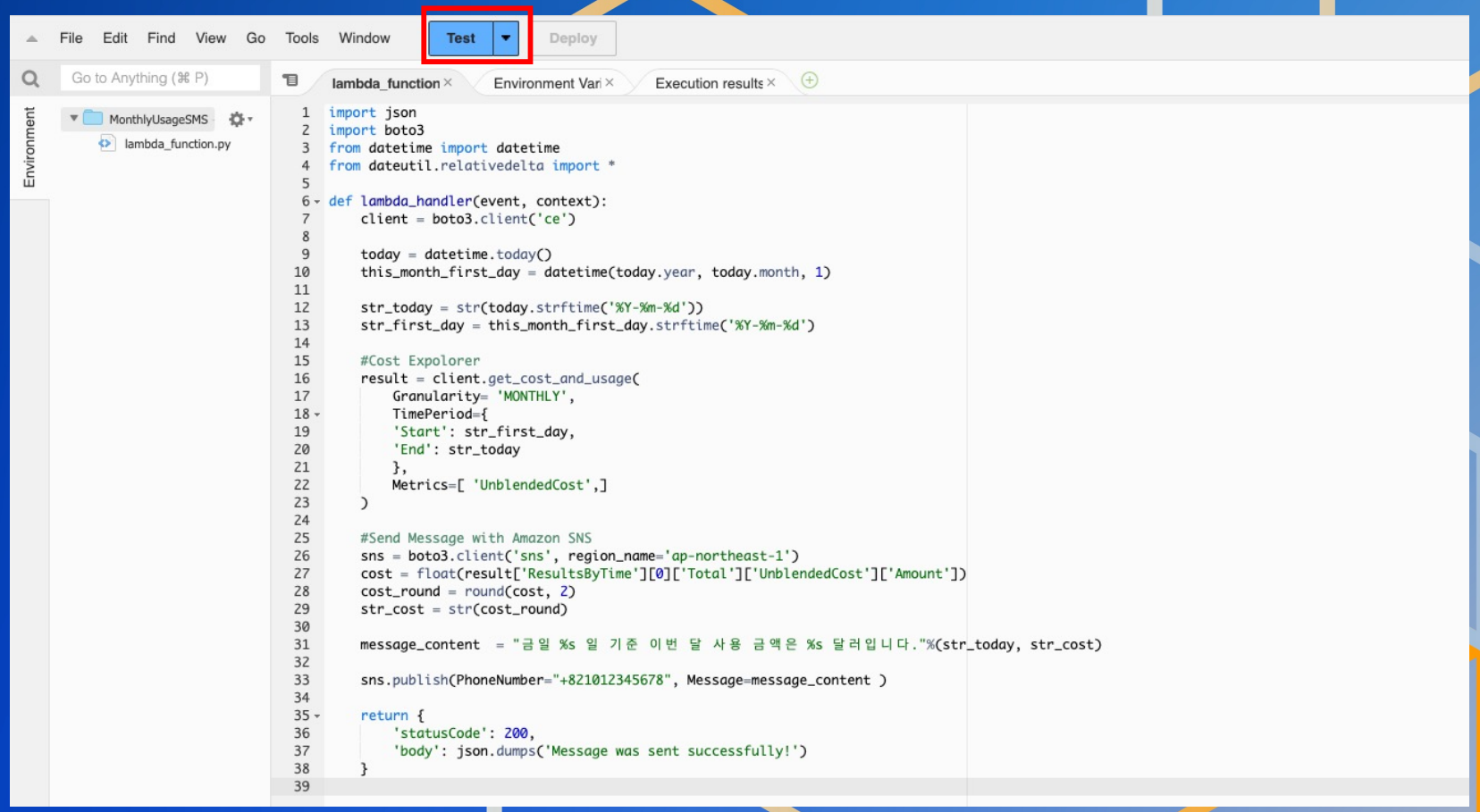

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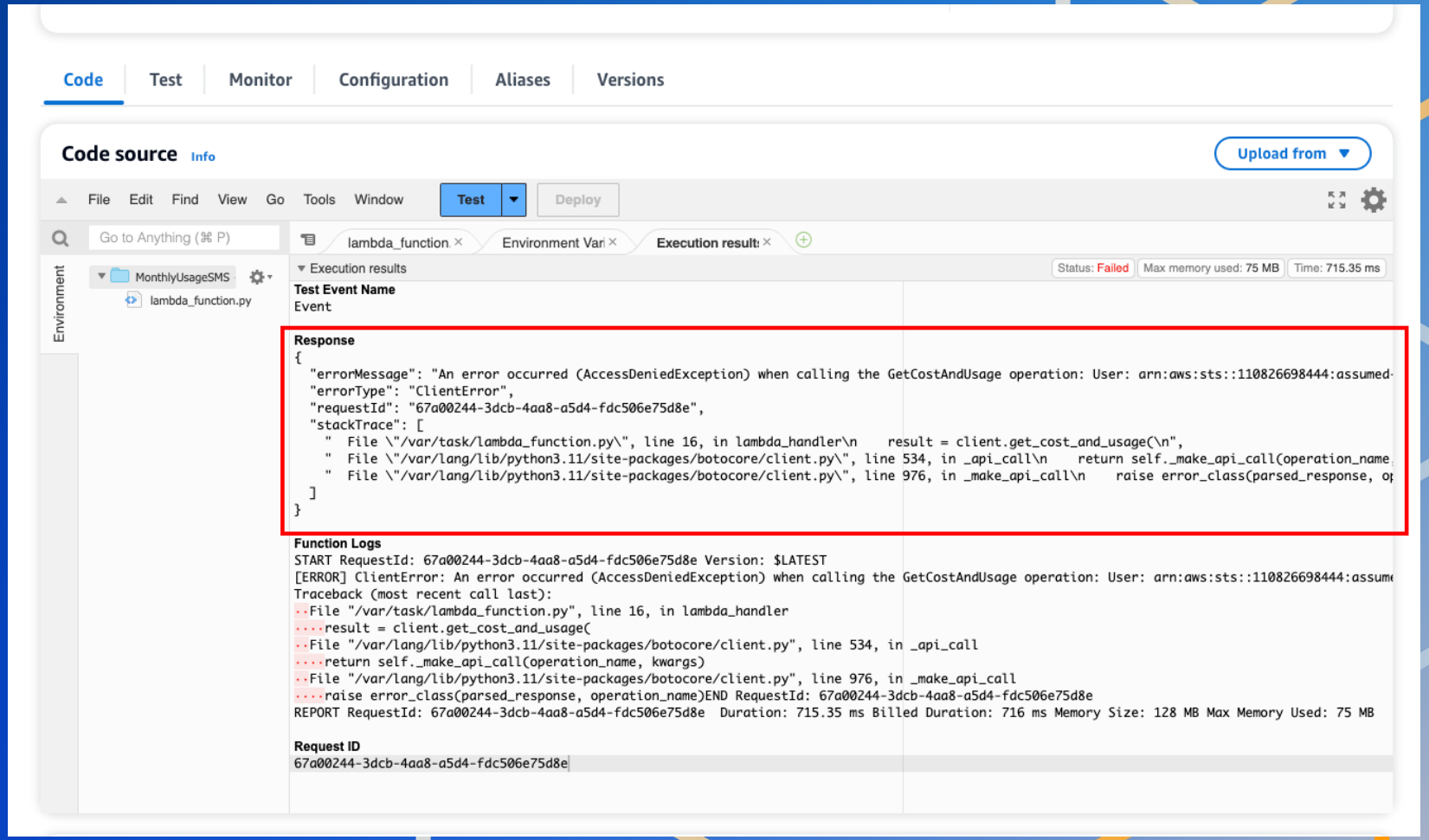

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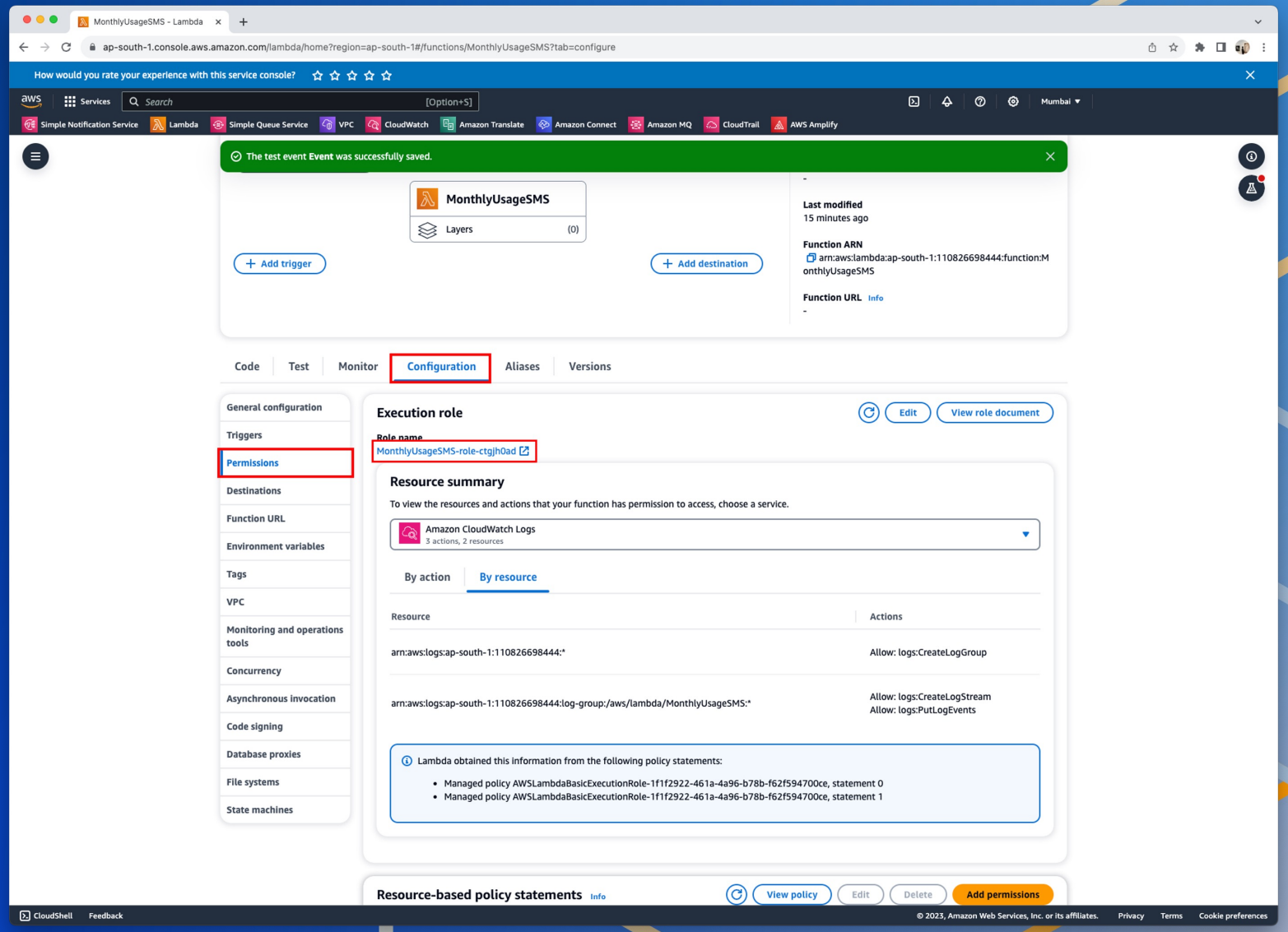

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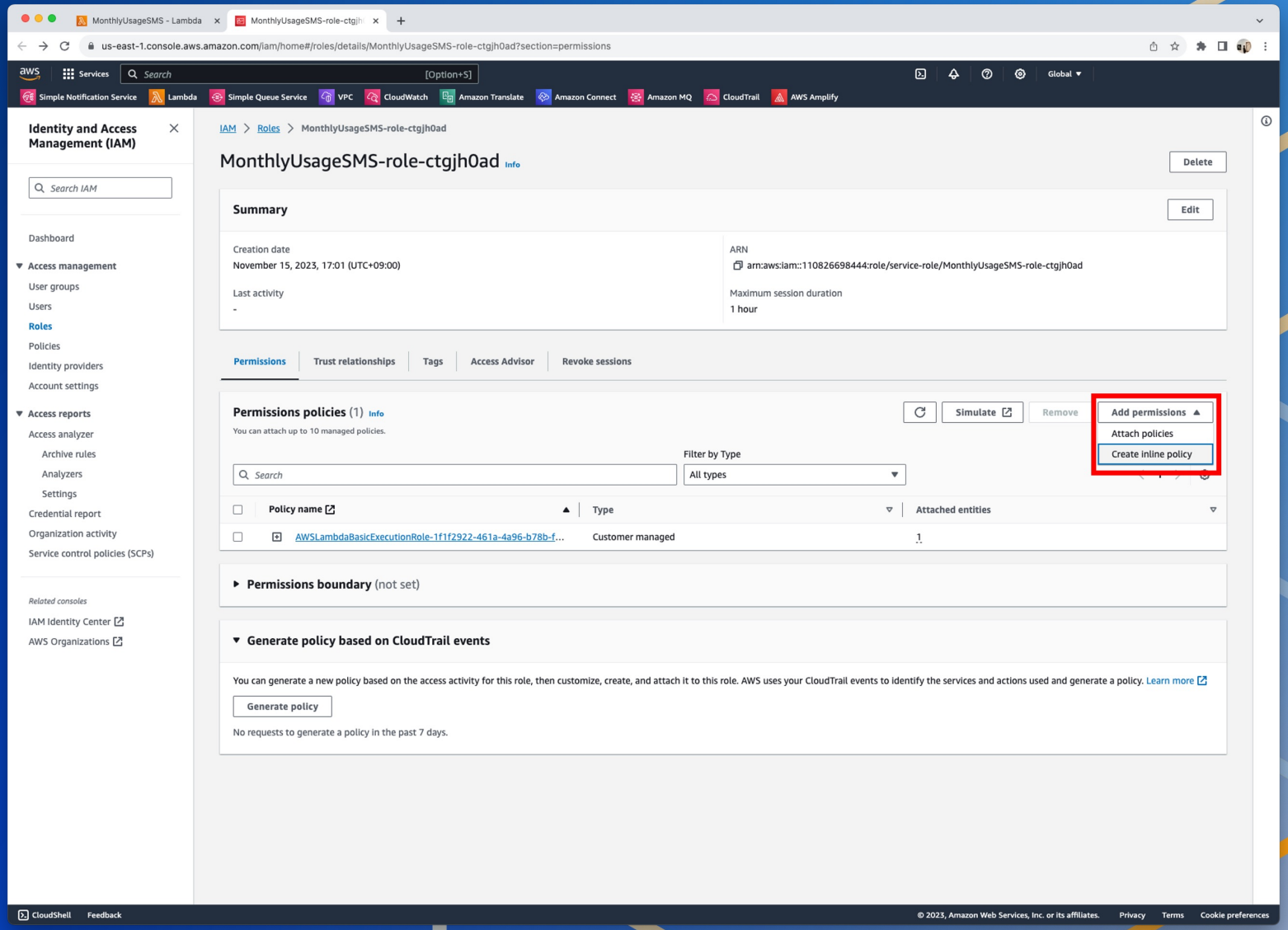

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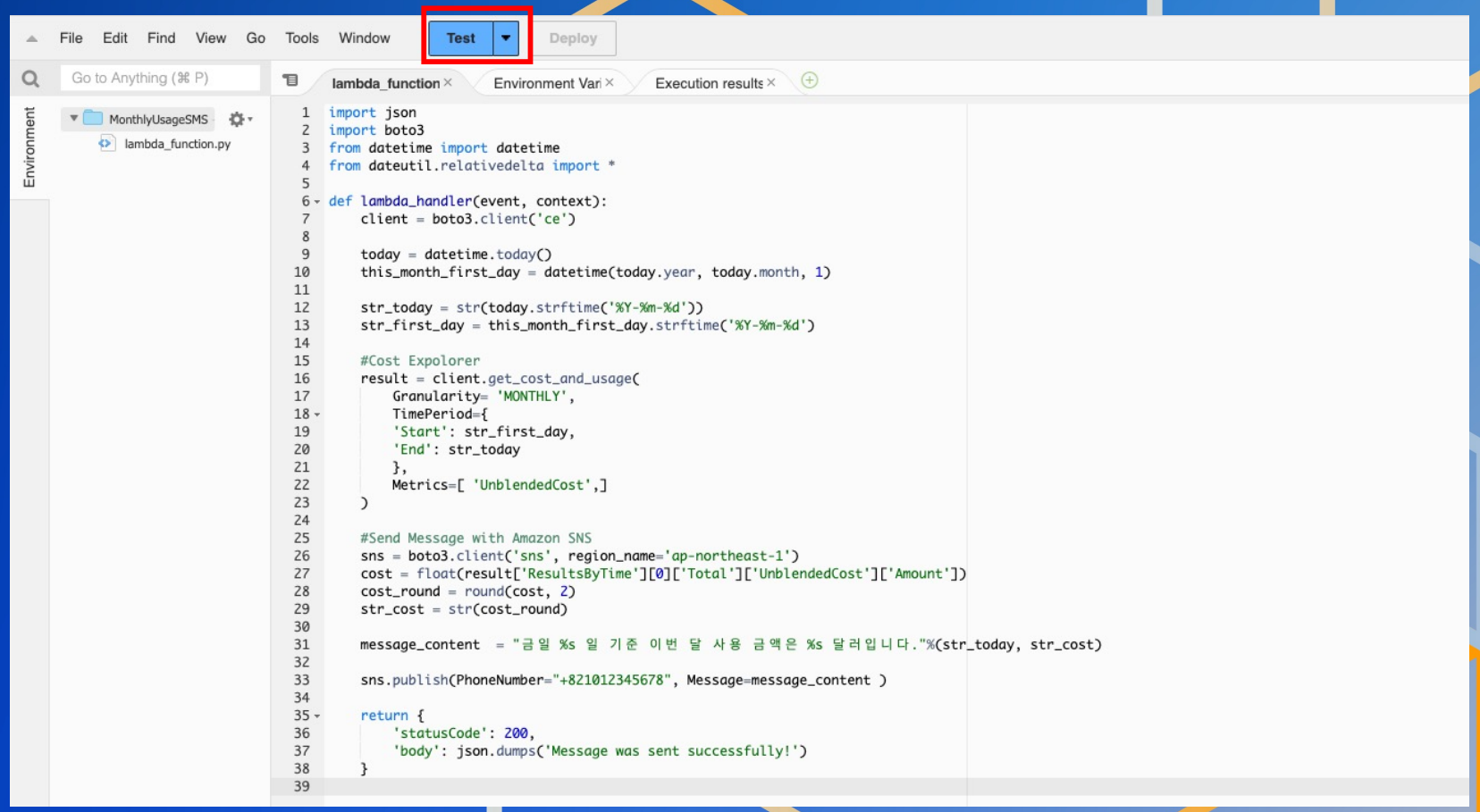

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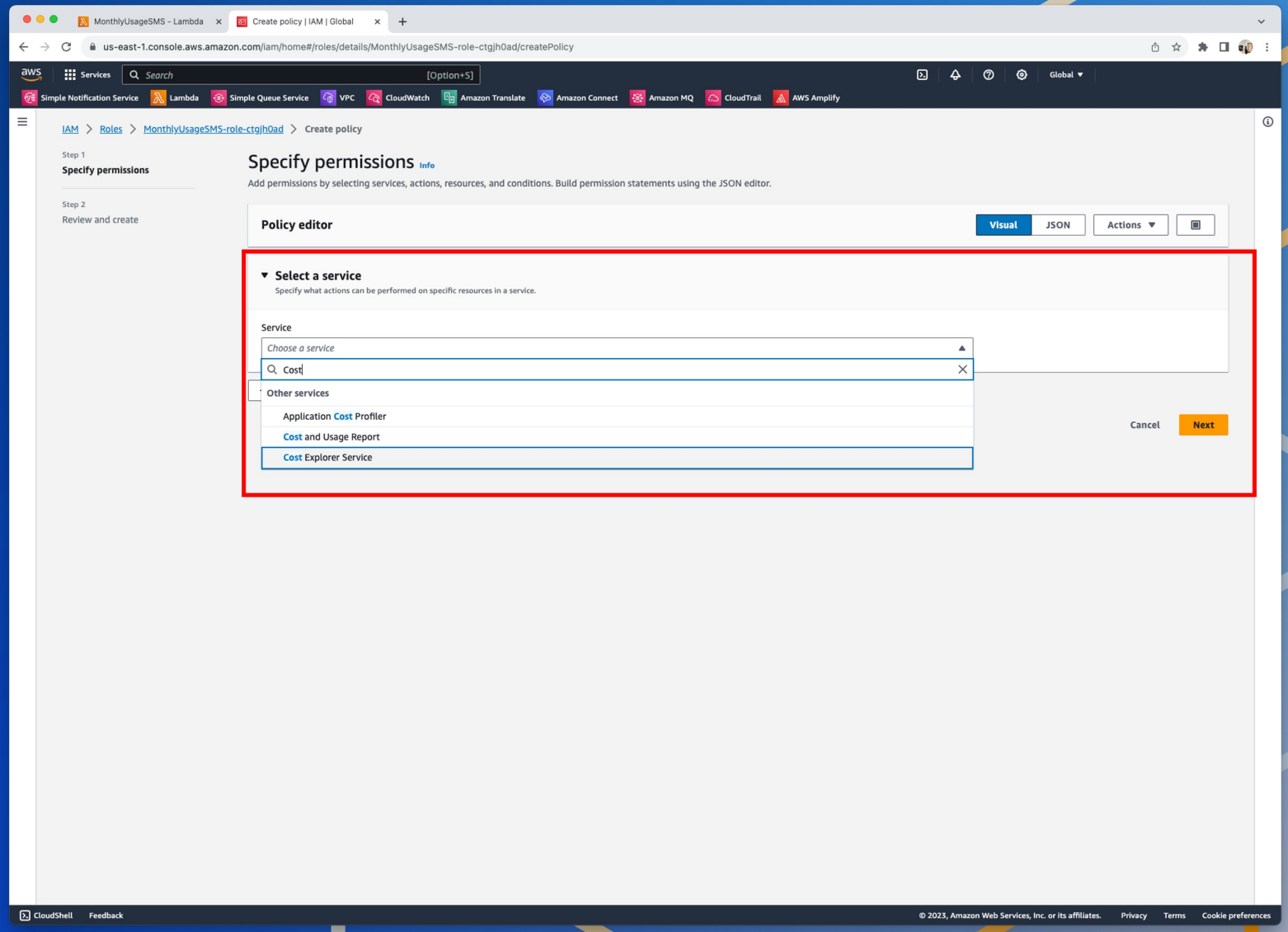

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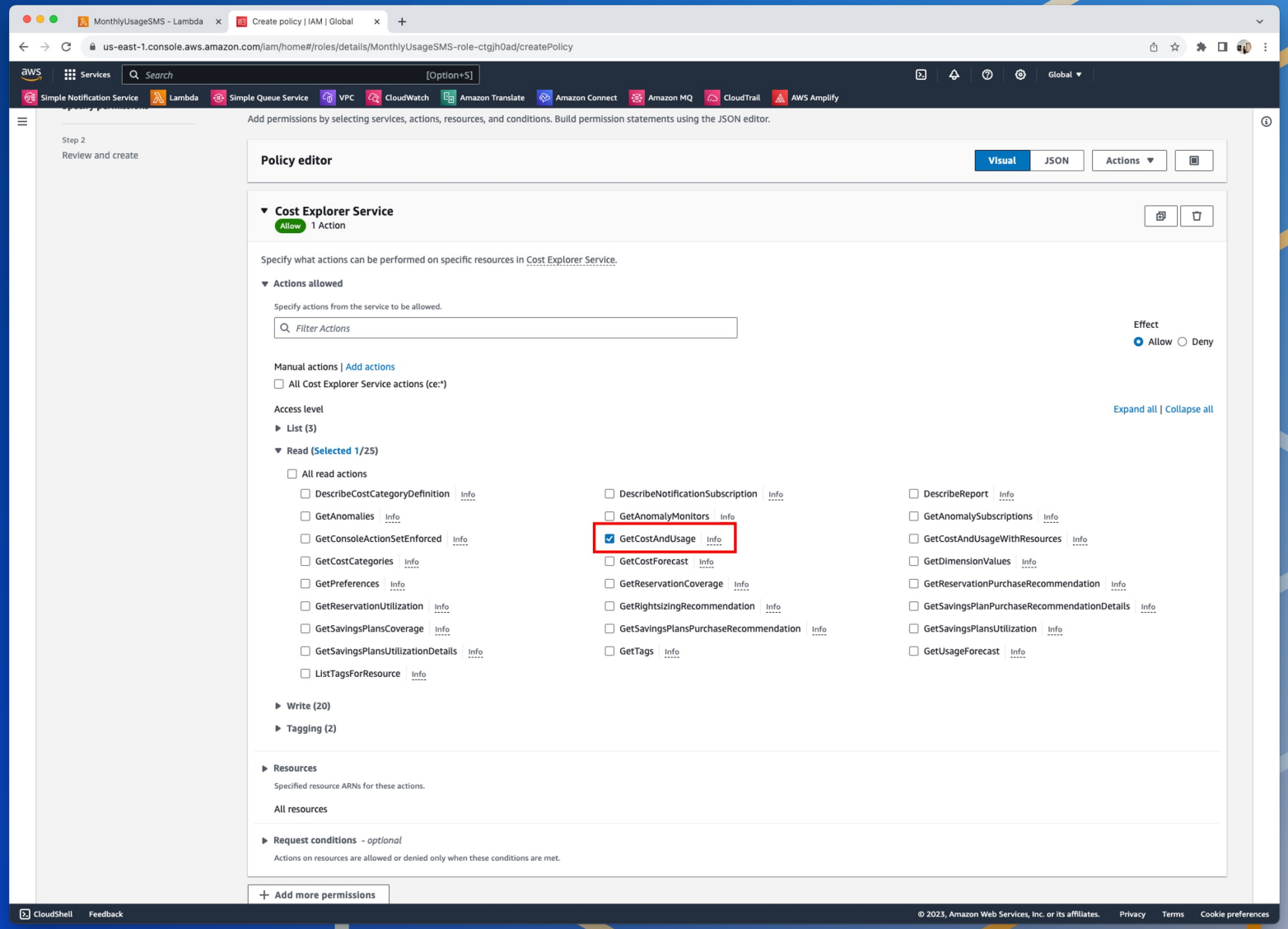

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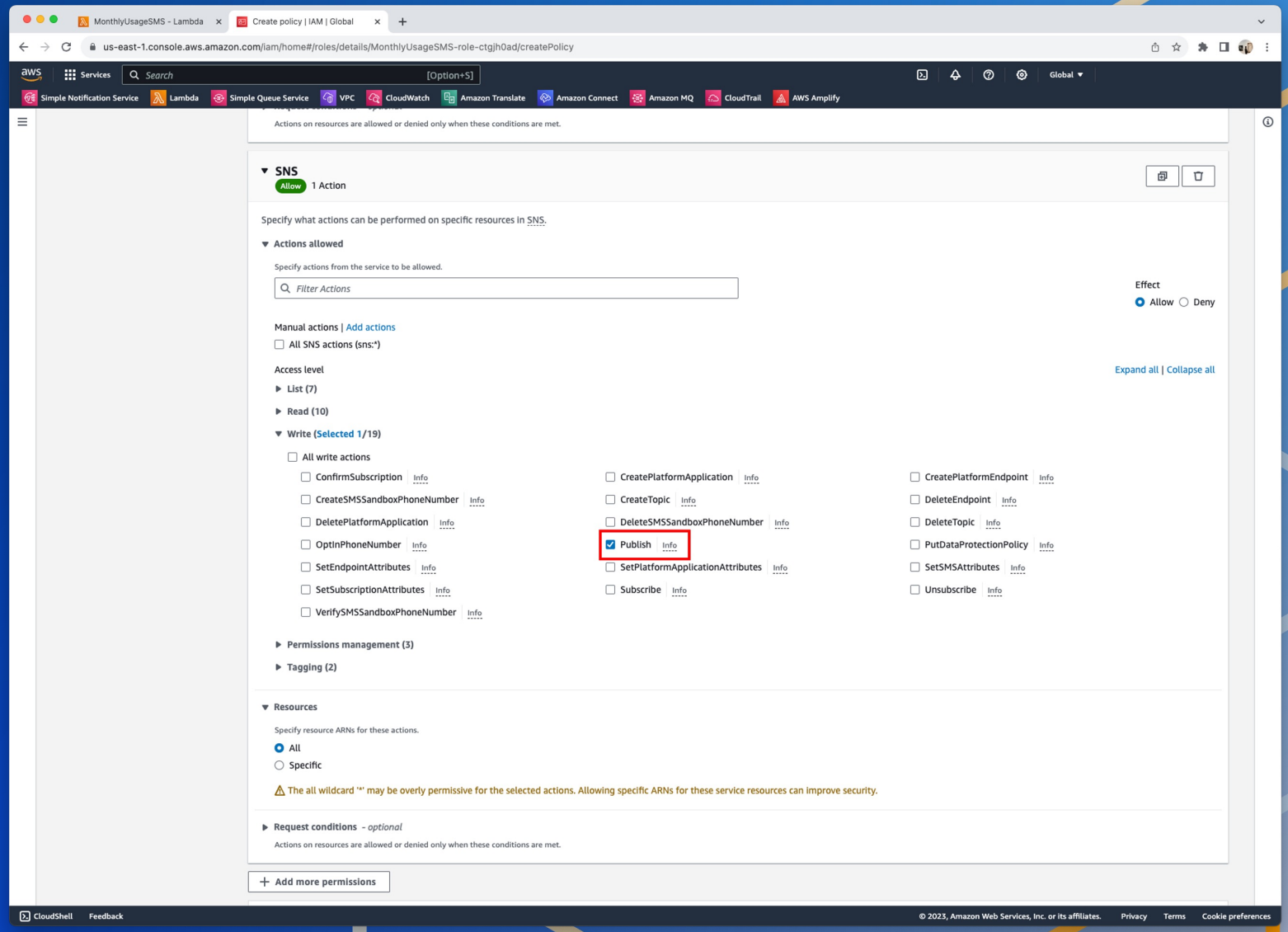

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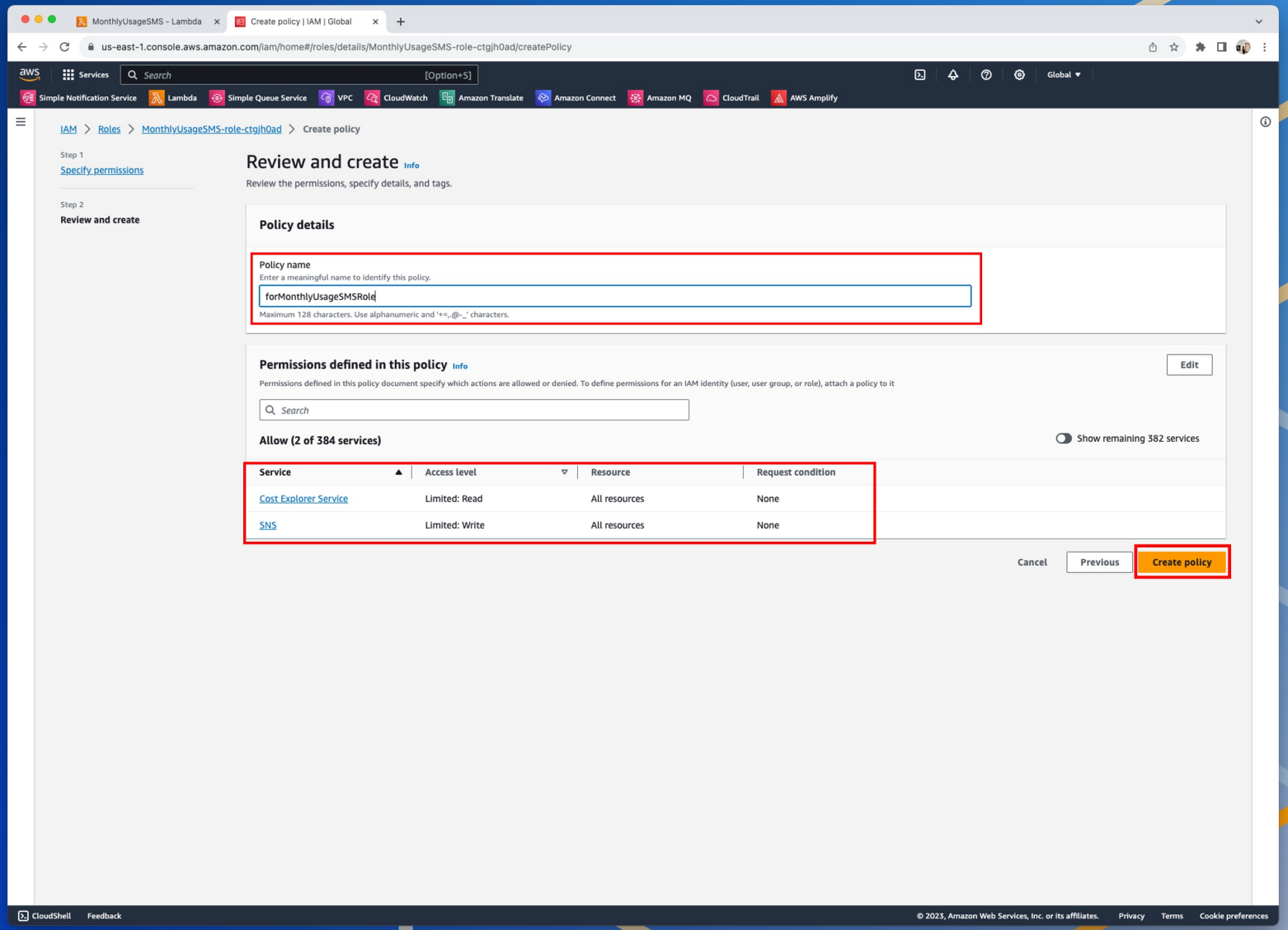

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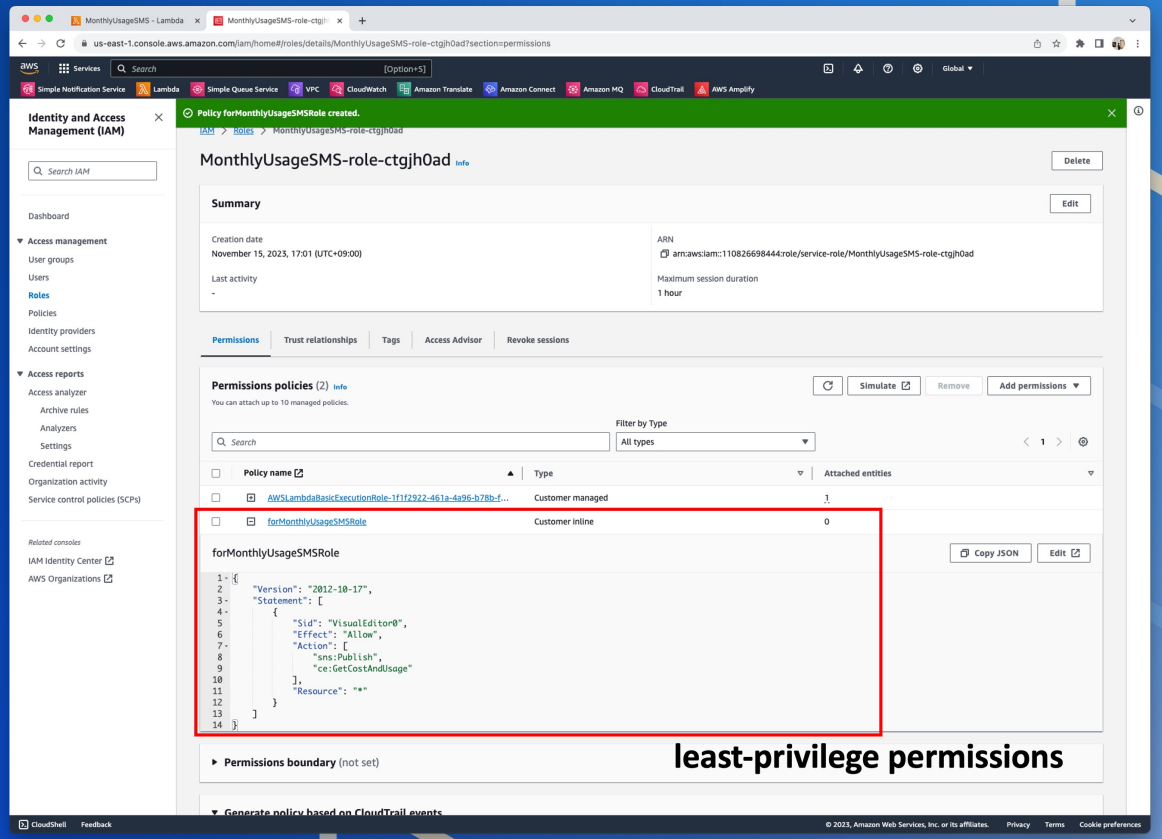

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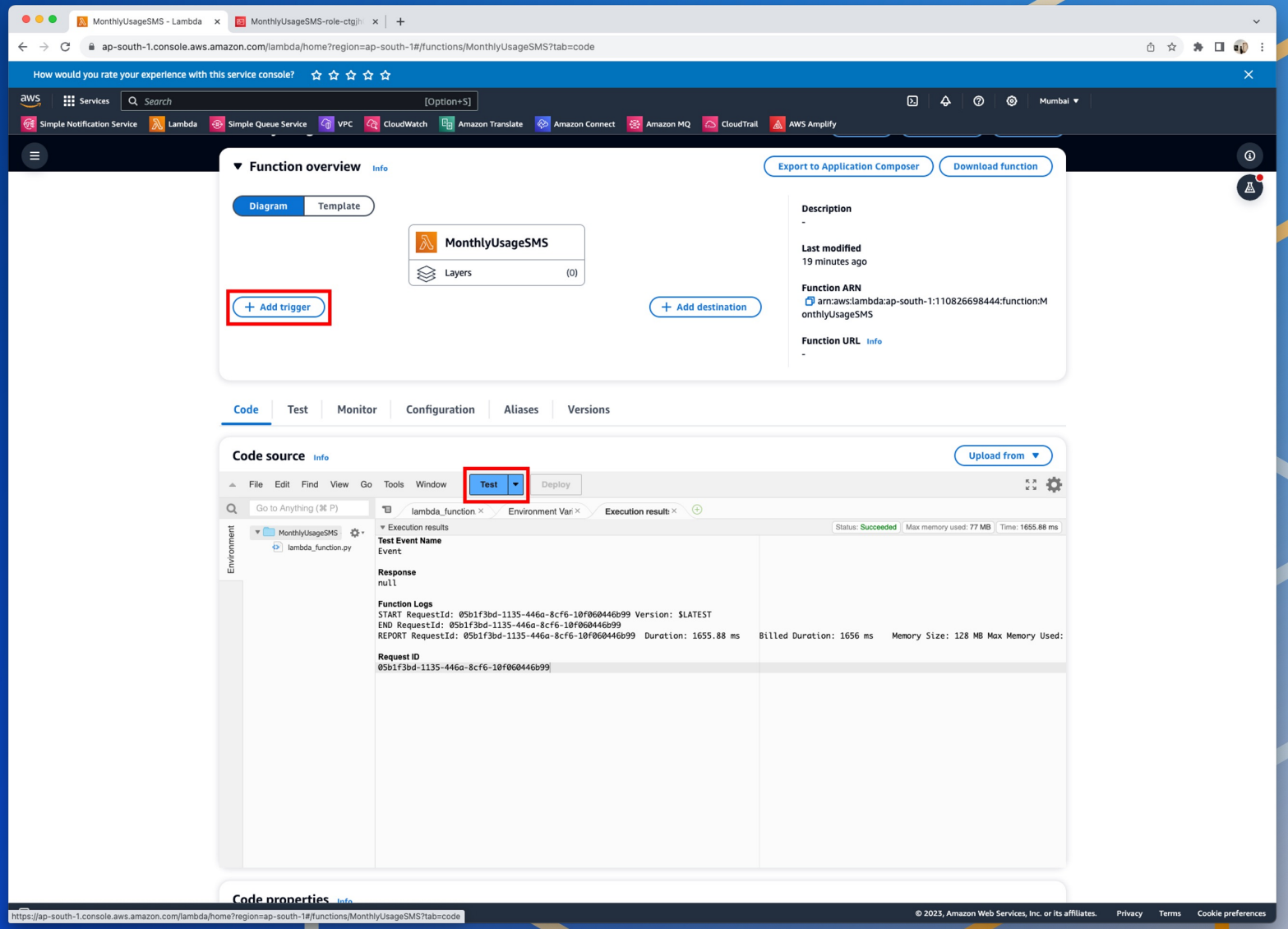

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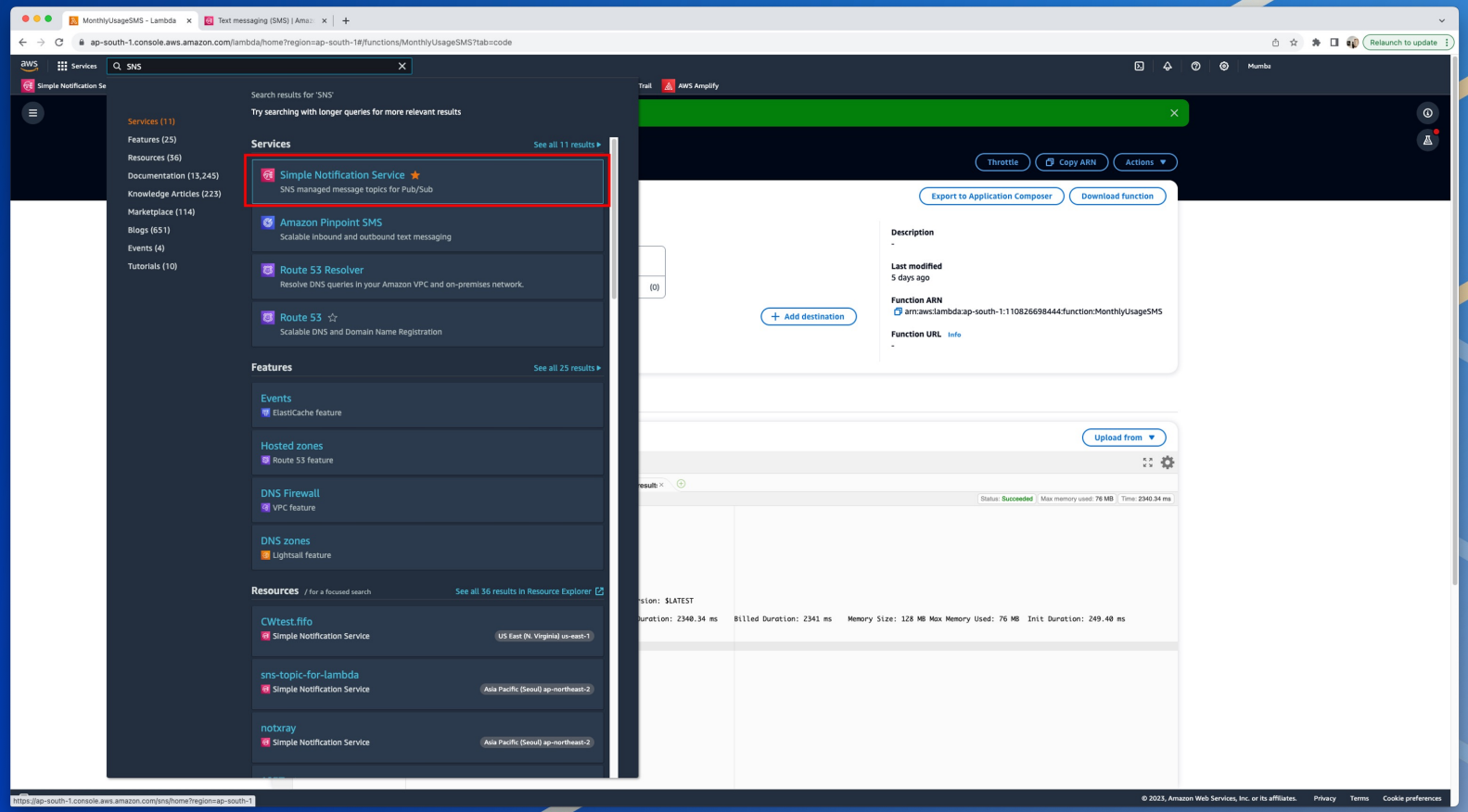

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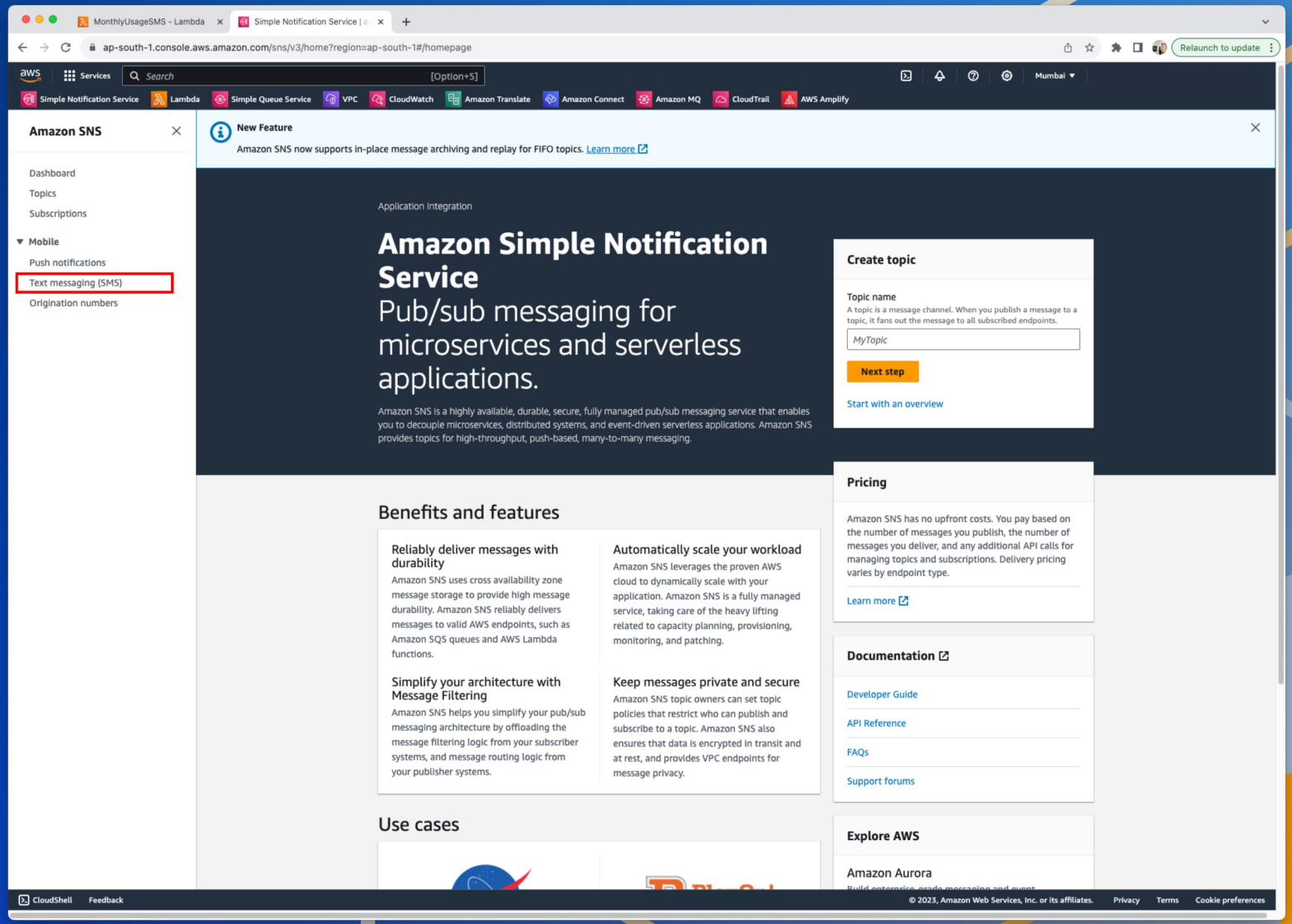

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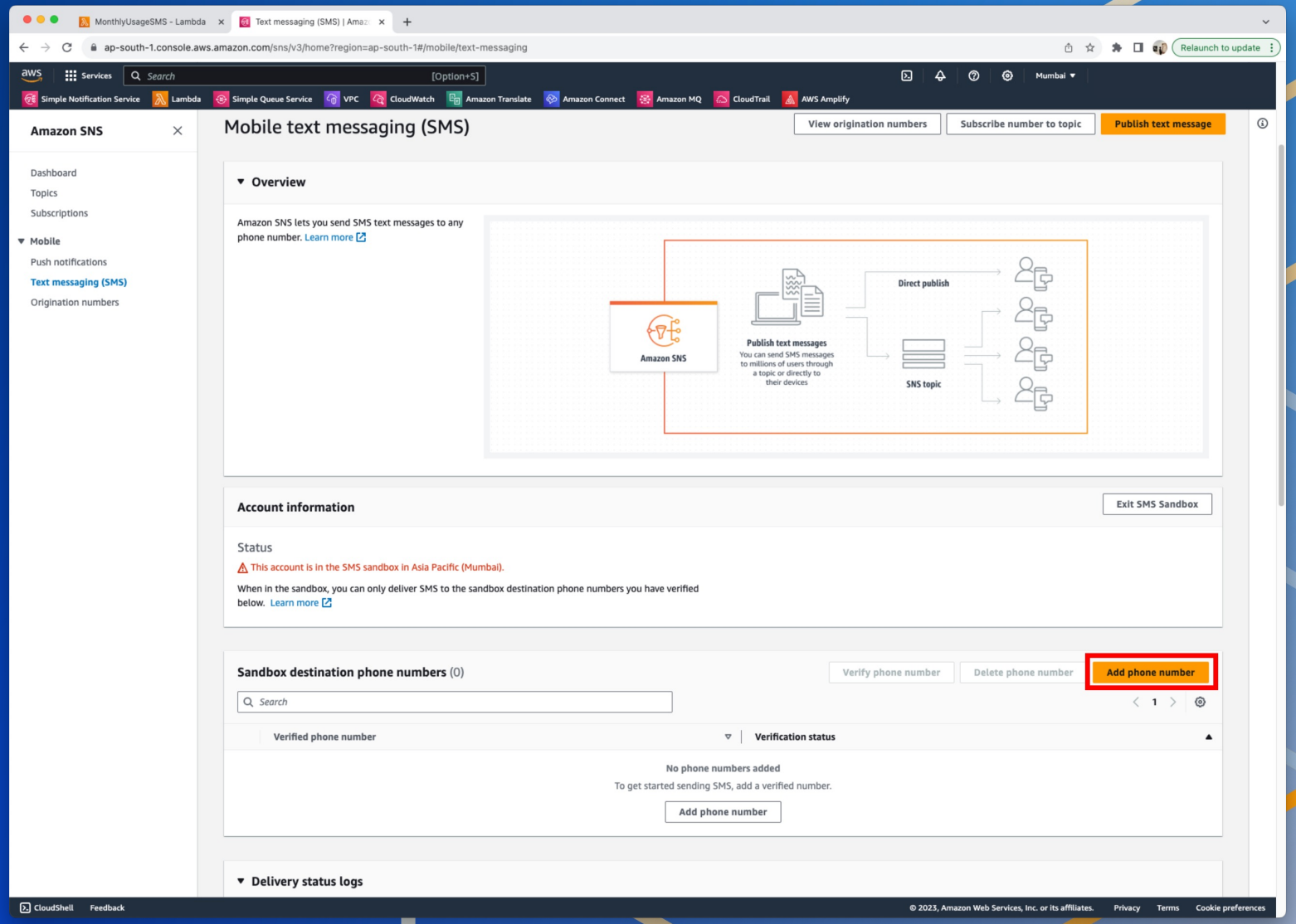

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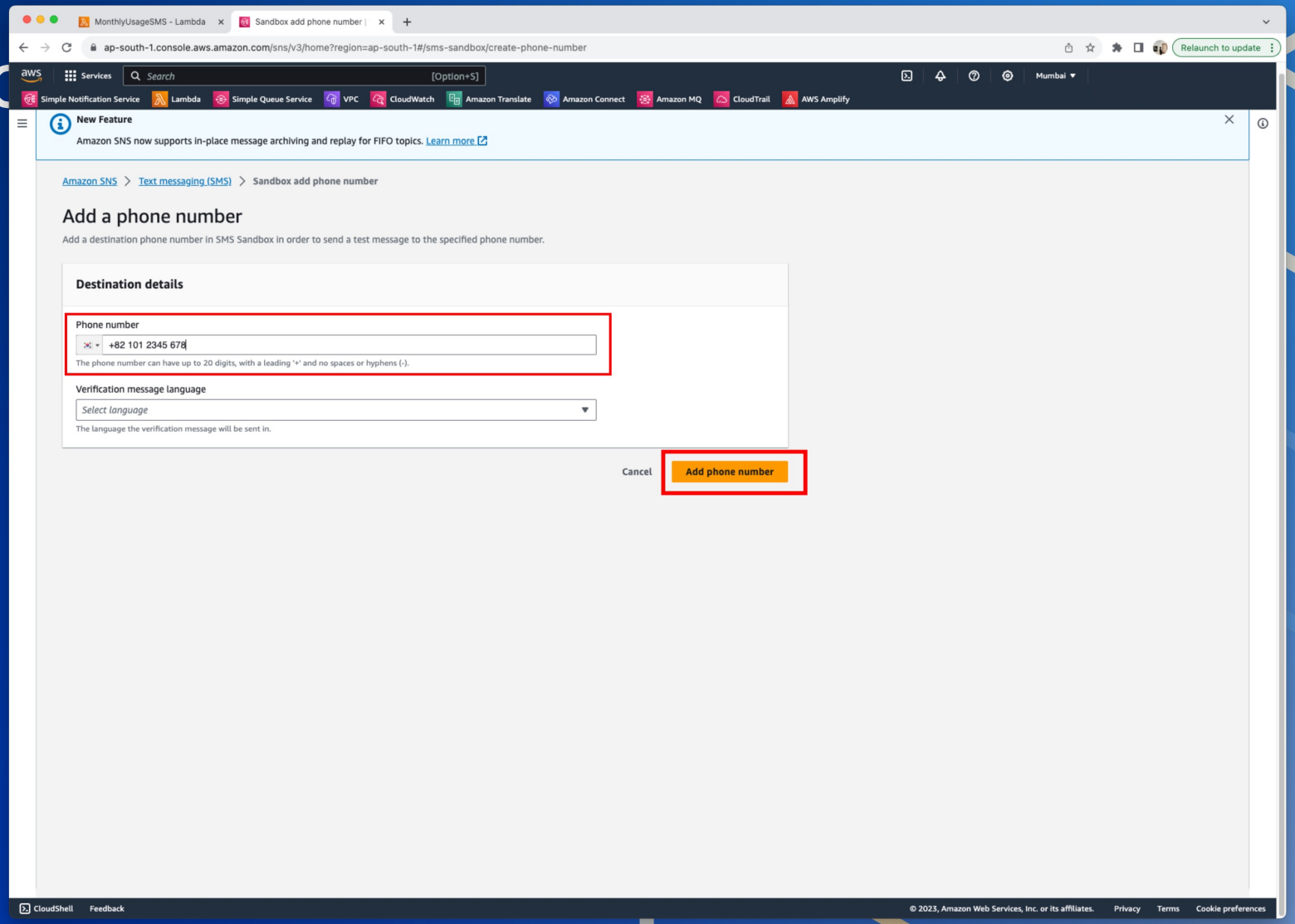

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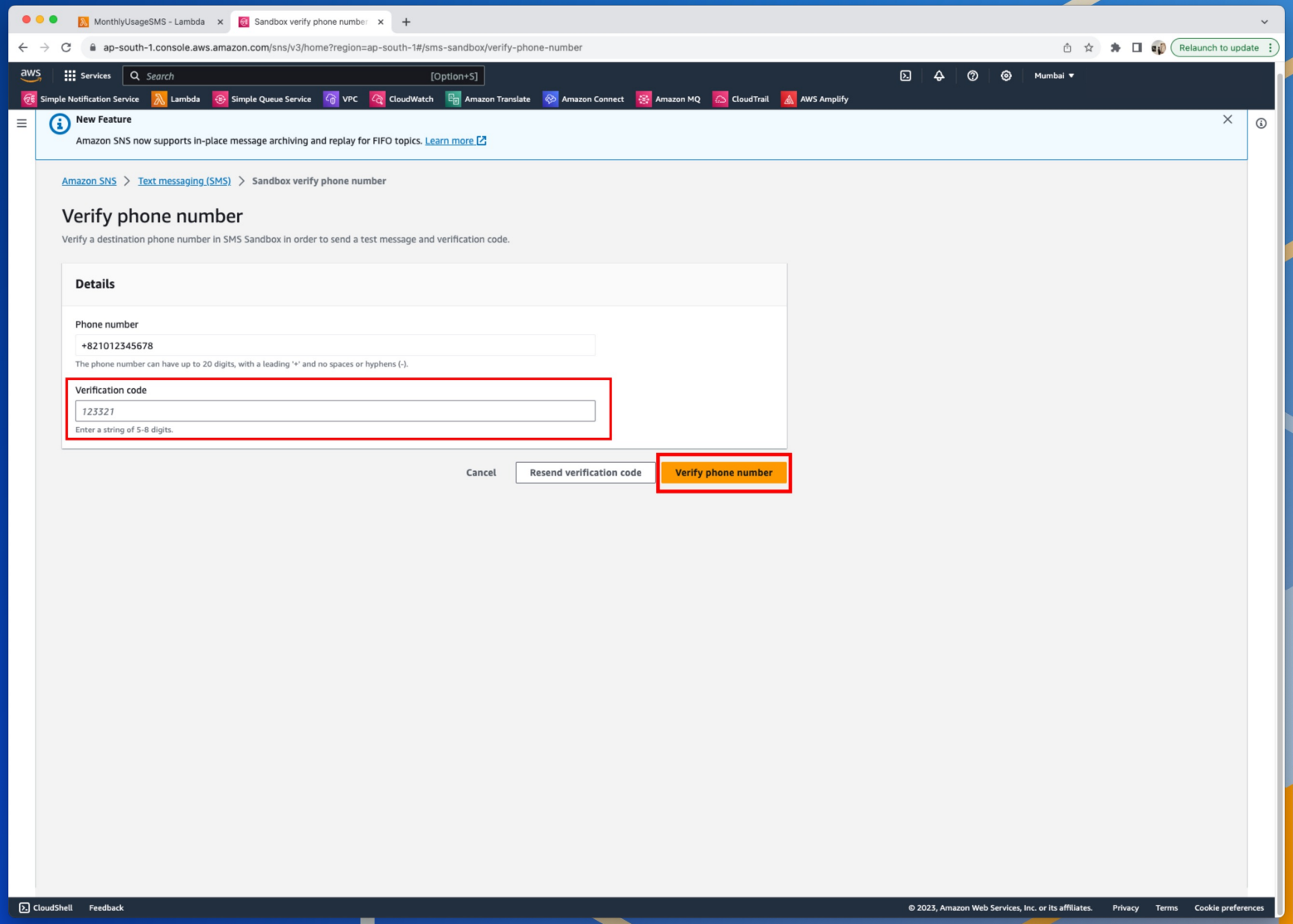

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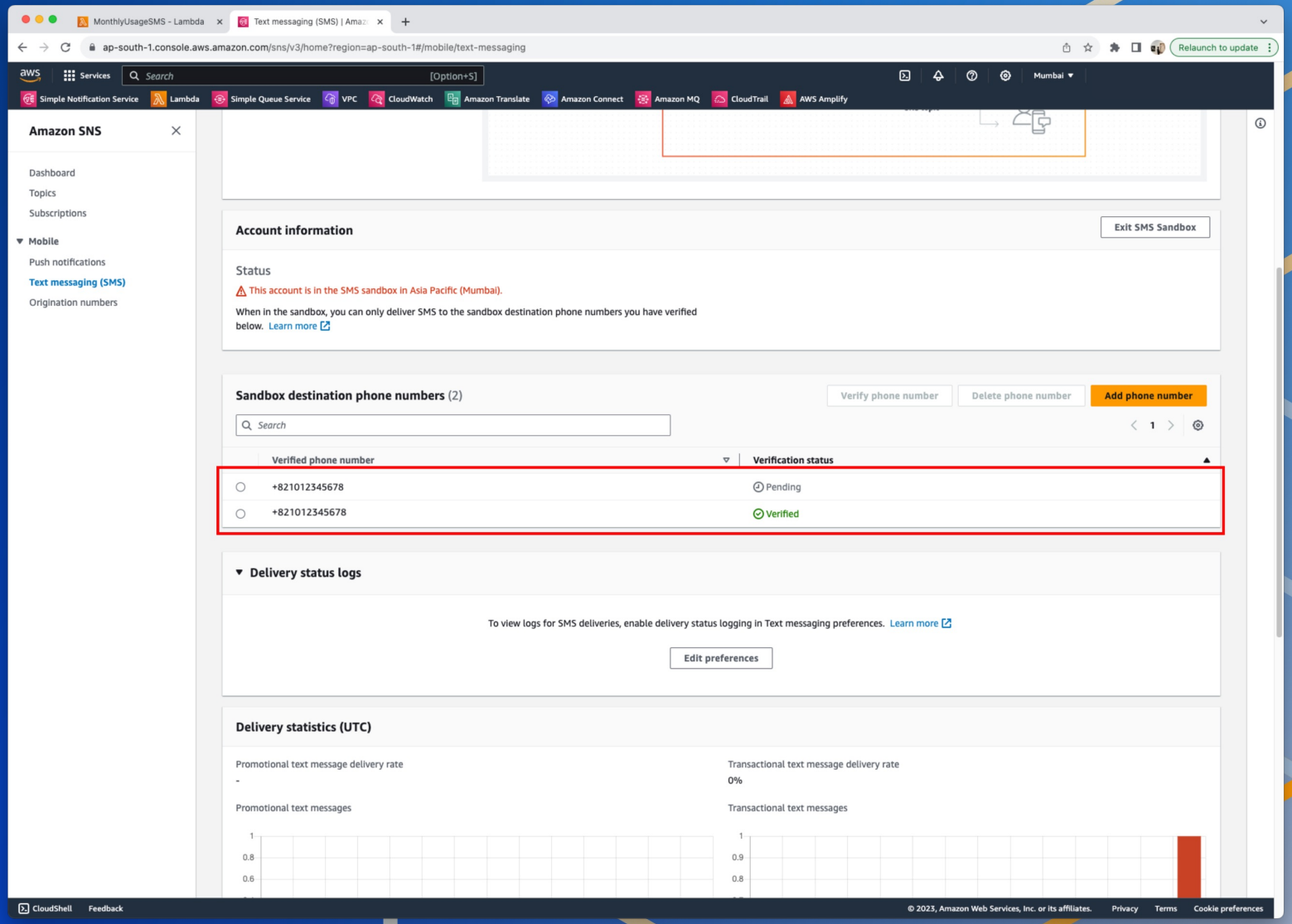

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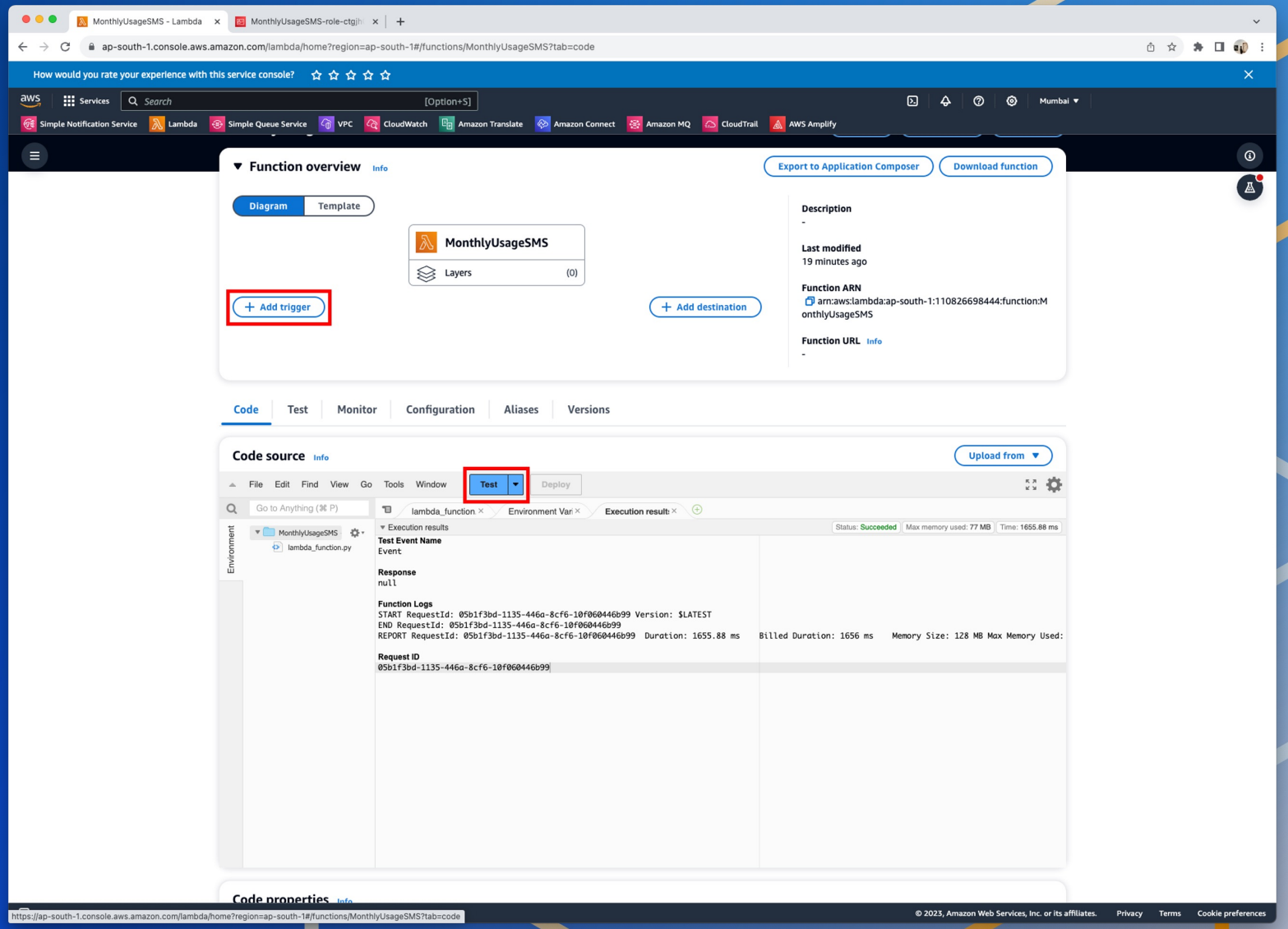

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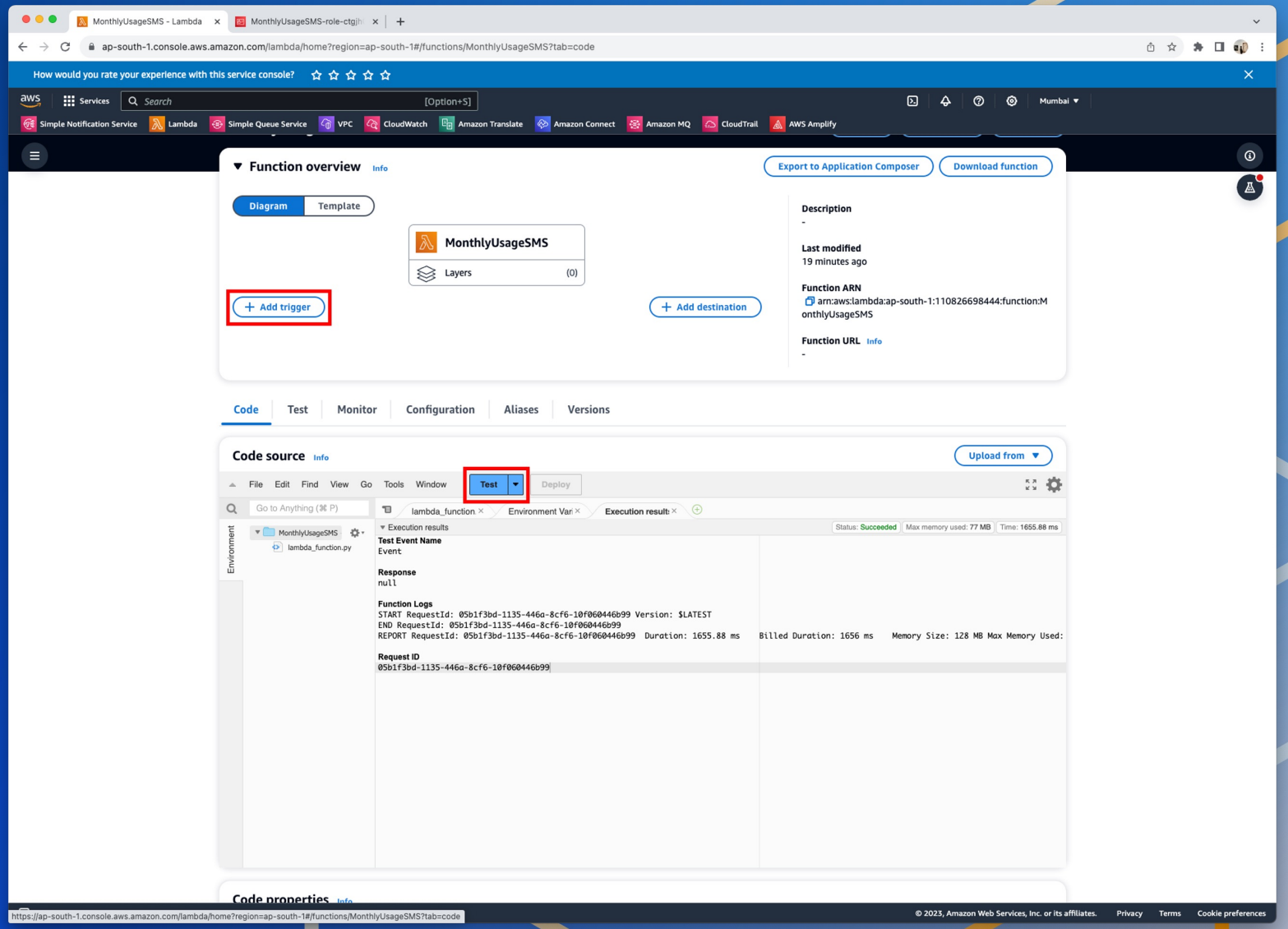

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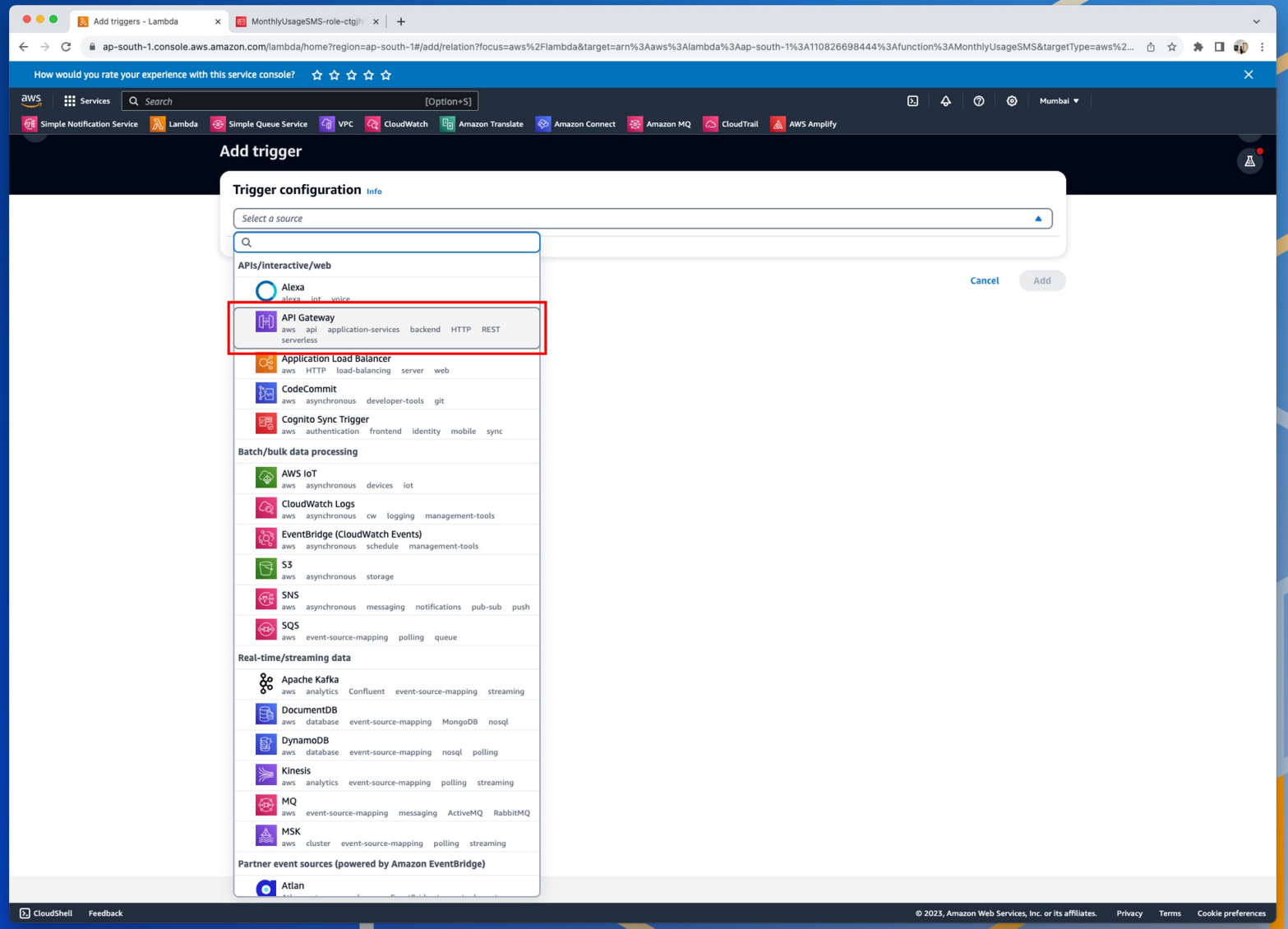

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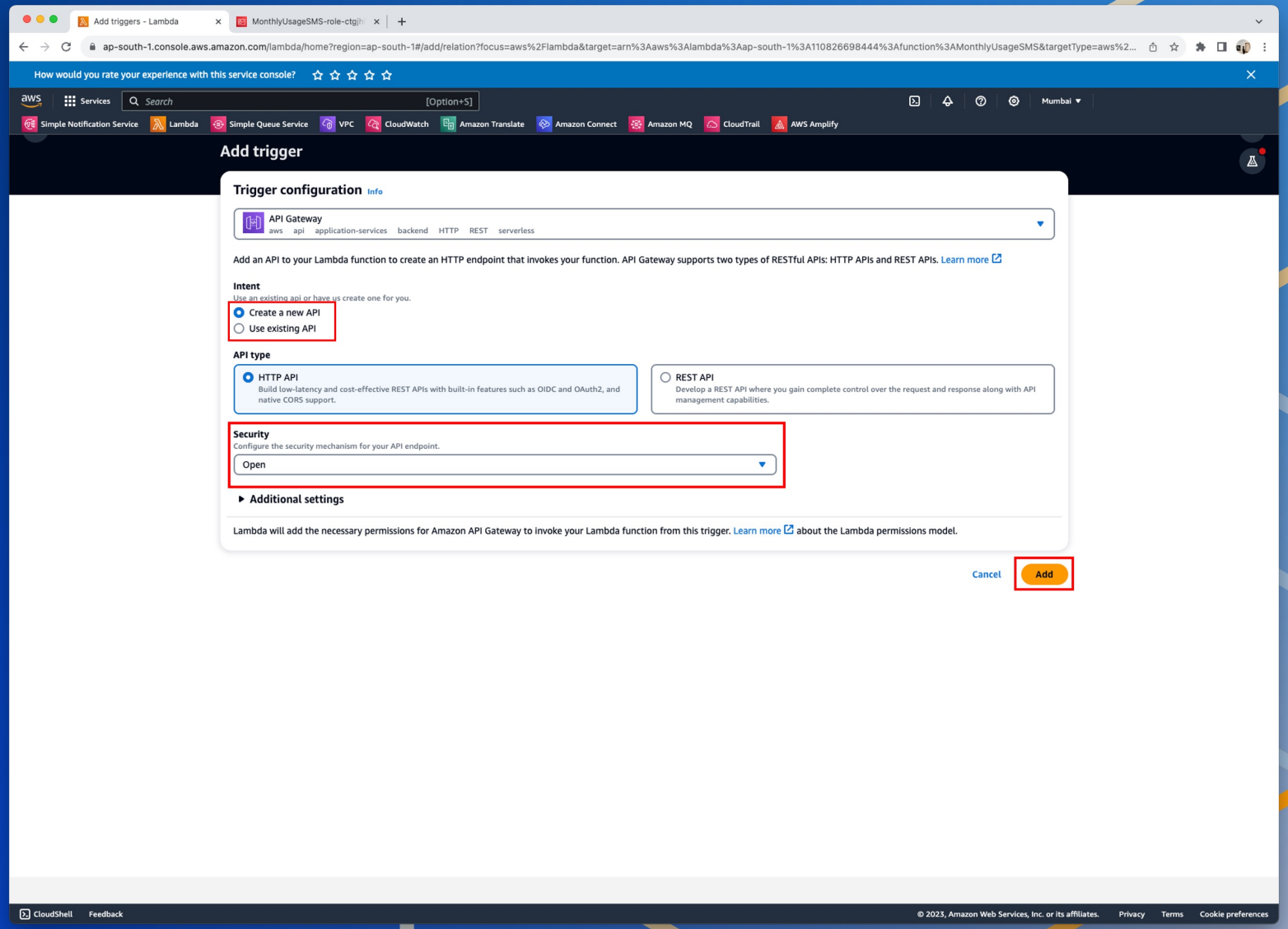

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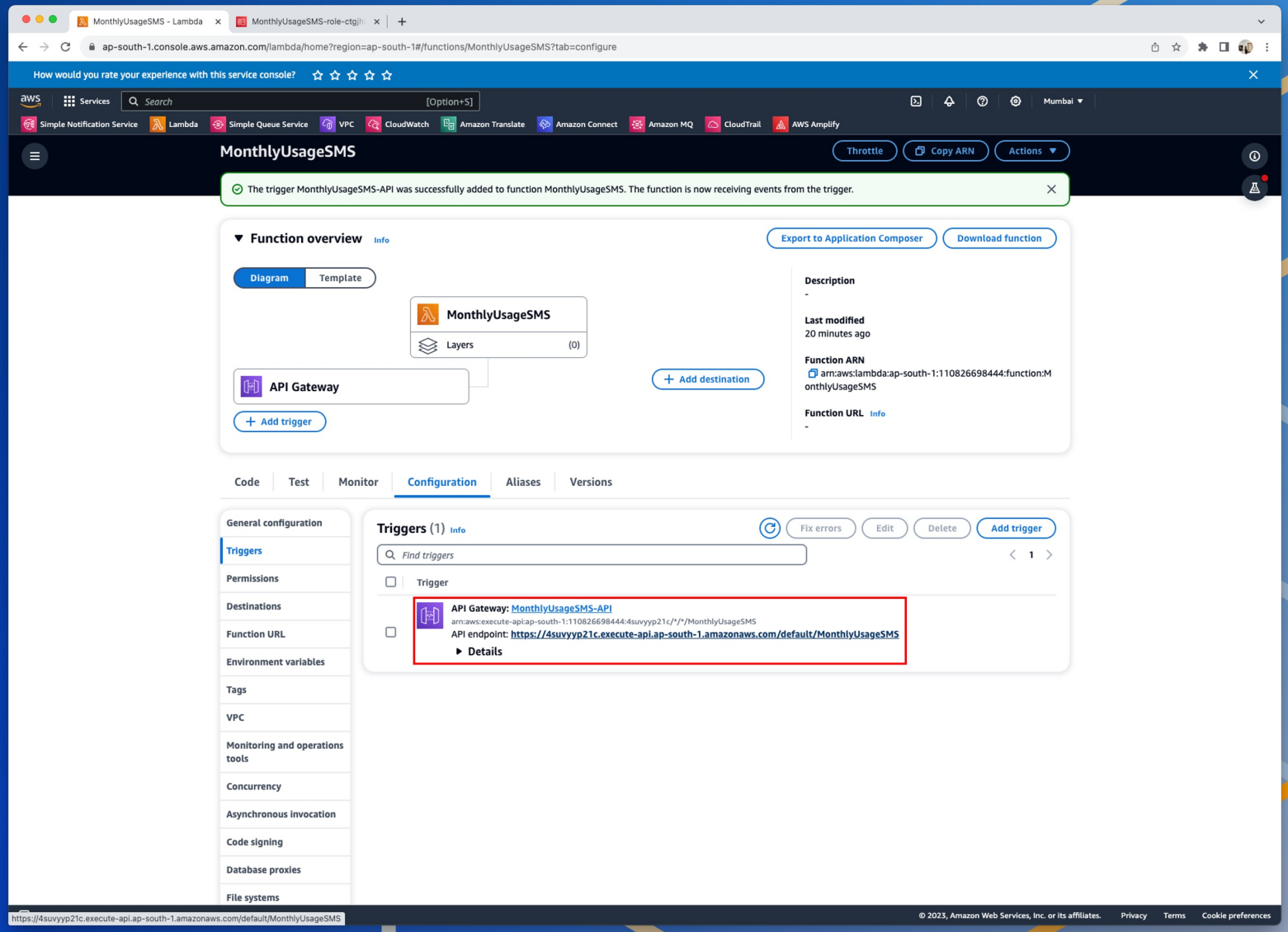

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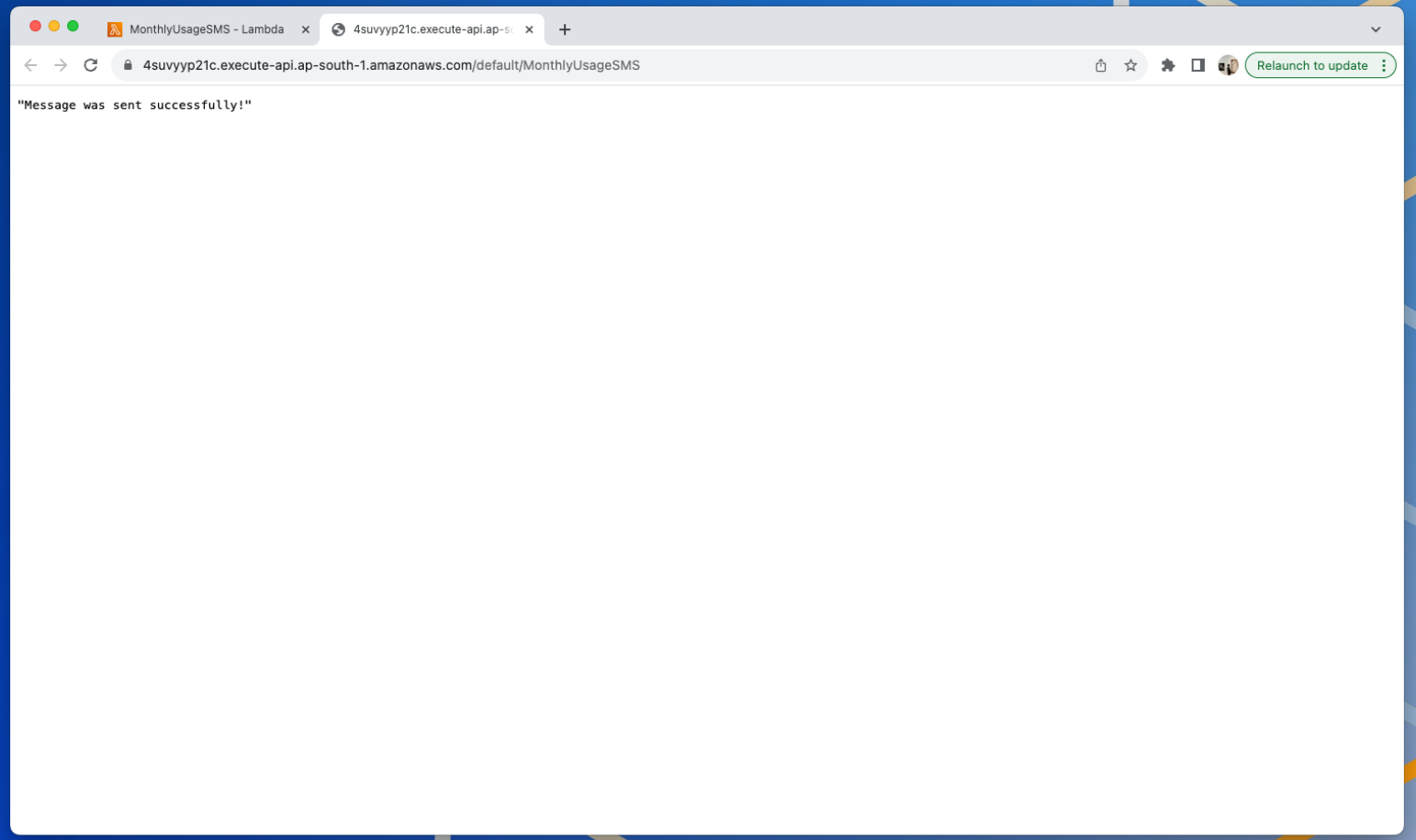

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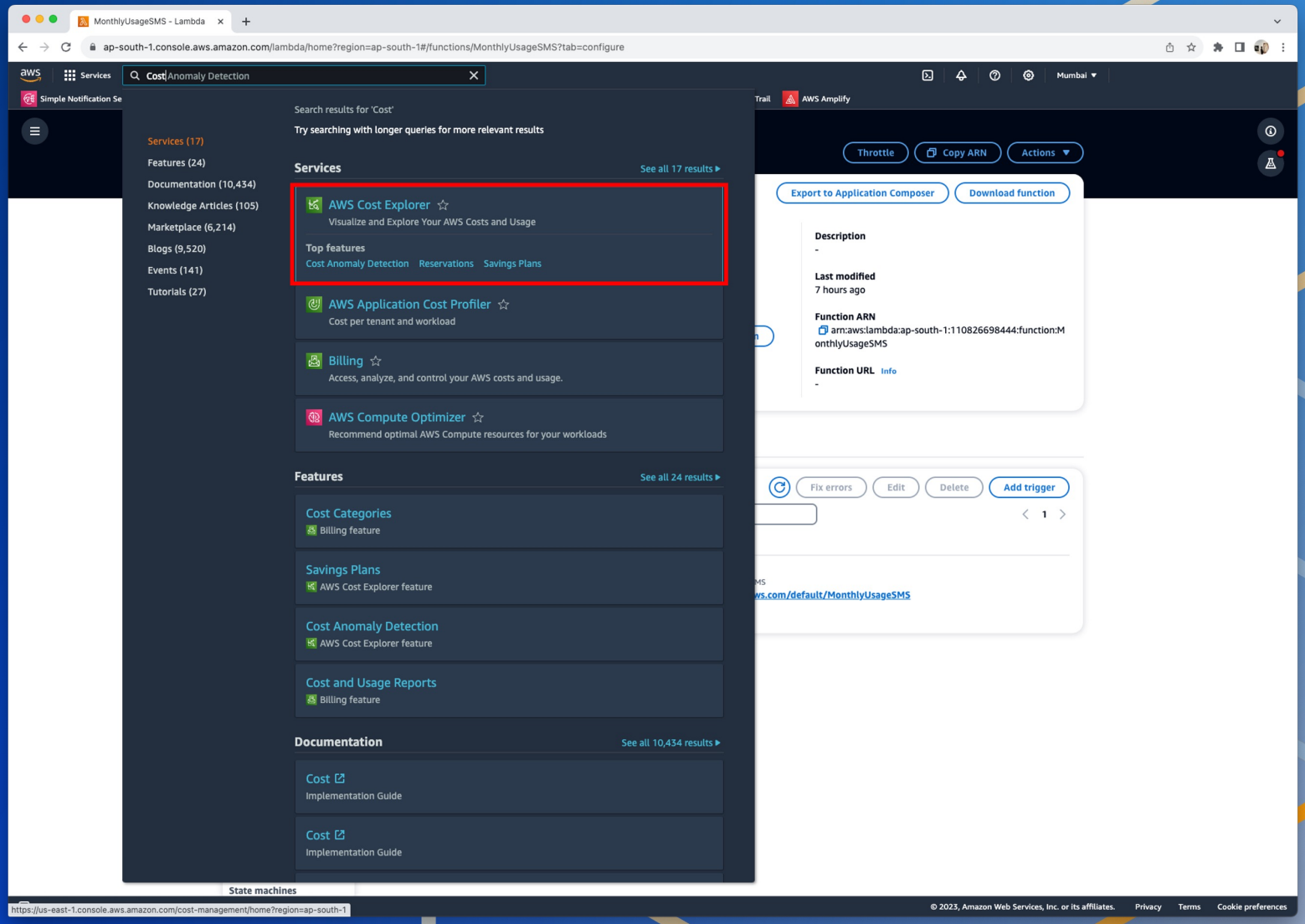

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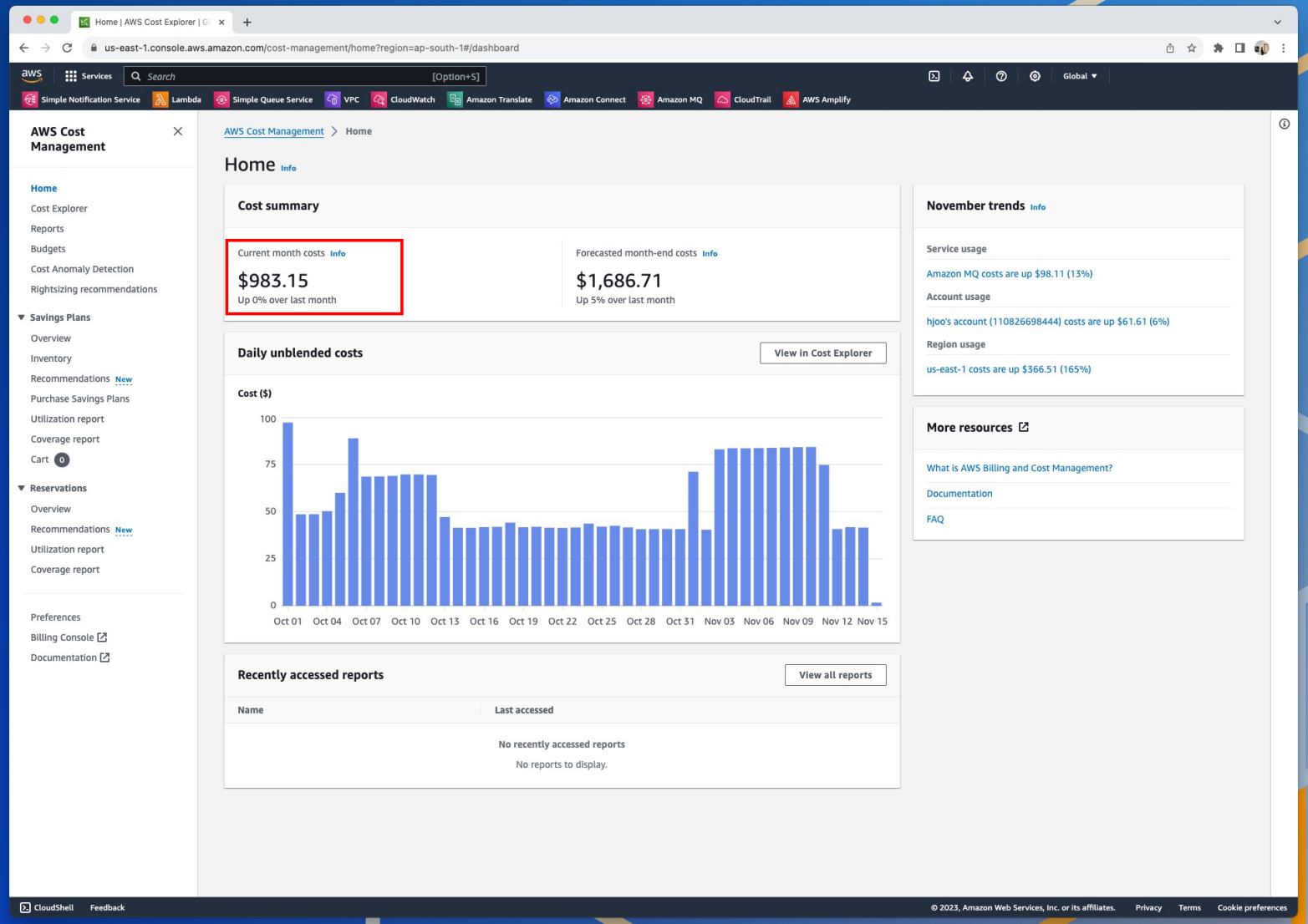

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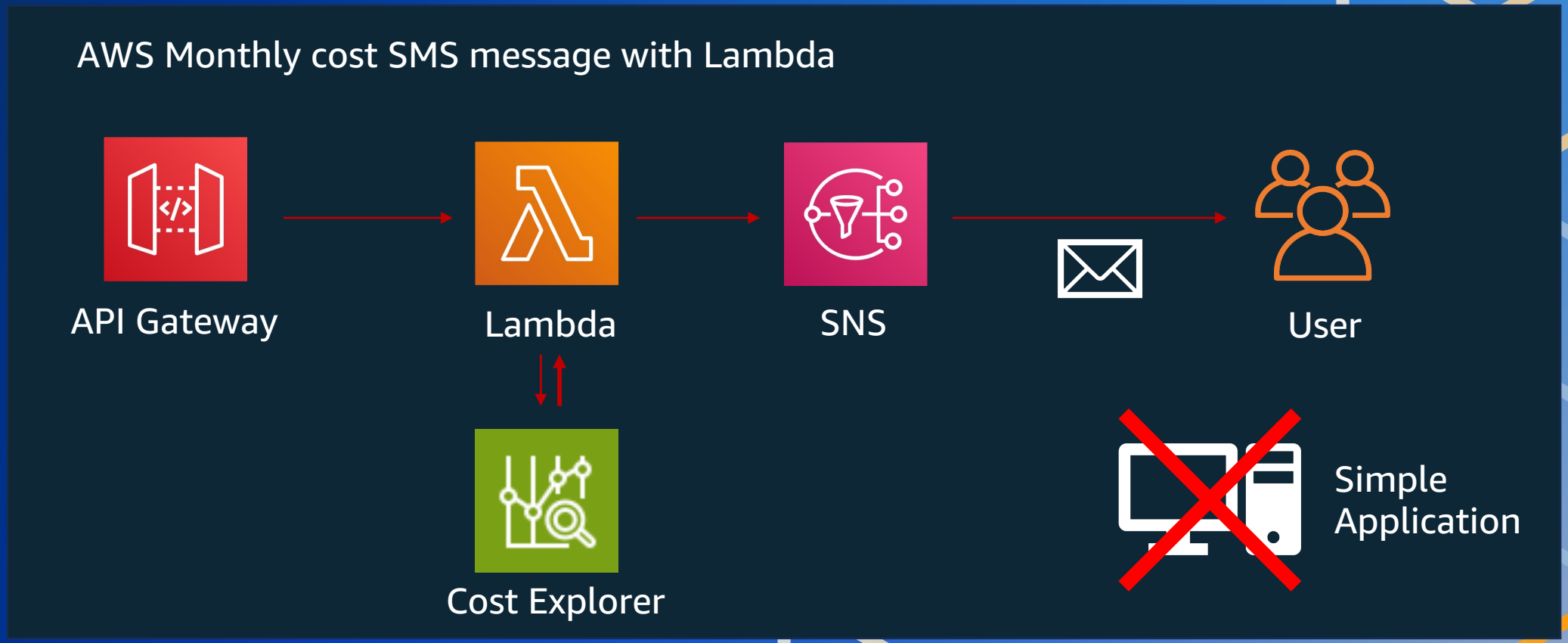

Delete Resources

API Gateway

Lambda

SNS

Only pay for what you use

Thank you!

Hyoungjoo Lee