

BankingCo Amazon Connect Demo

Vedant Daga

Demo Agenda

- Idea
- Design Considerations and Variables
- Call Flows
- Reporting

Preparing the Connect Instance

Determine the Queues

- General Customer Support
- Sales
- Fraud Reporting

Hours of Operations for Queues

Name	Description	Tags
BankingCoFraudDept	Hours of operation for BankingCo's Fraud Department	Project: BankingCo
BankingCoGeneralSupport	General Support Hours of Operation for BankingCo	Project: BankingCo
BankingCoSales	Hours of Operation for BankingCo Sales Department	Project: BankingCo

Edit BankingCoSales

Sunday

+ Add hour

Monday

+ Add hour

Start time

08:00 AM ⏱

End time

06:00 PM ⏱



Tuesday

+ Add hour

Start time

08:00 AM ⏱

End time

06:00 PM ⏱



Wednesday

+ Add hour

Start time

08:00 AM ⏱

End time

06:00 PM ⏱



Thursday

+ Add hour

Start time

08:00 AM ⏱

End time

06:00 PM ⏱



Friday

+ Add hour

Start time

08:00 AM ⏱

End time

06:00 PM ⏱



Saturday

+ Add hour

Start time

08:00 AM ⏱

End time

12:00 PM ⏱



Creating Queues for BankingCo

BankingCoFraudReport	Queue for important fraud instance reporting	<input checked="" type="checkbox"/> Enabled	Project: BankingCo
BankingCoSalesQueue	Sales Queue for Banking Co	<input checked="" type="checkbox"/> Enabled	Project: BankingCo

Edit BankingCoFraudReport

Queue Details

Name	BankingCoFraudReport
Required	20 / 127

Description	Queue for important fraud instance reporting
	44 / 250

Hours of operation

Set the hours of operation and timezone for a queue. [Learn more.](#)

Search hours of operation	X ▾
BankingCoFraudDept	
Required	

[Show additional queue information ▾](#)

Security Profile for an Example Agent

<input type="checkbox"/> BankingCoAgent	Agent Security Profile for BankingCo	Views.View	CCP: Access CCP	CCP: Outbound	CCP: VideoContact
		CustomerProfiles.View	CustomerProfiles.CalculatedAttributes.View		
		Agent applications: AmazonQConnect	ContentManagement.View		
		Agent applications: CustomViews			

Routing Profile for an Example Agent

Edit BankingCoMainRoutingProfile

Cancel Save

Routing profile details
Routing profiles are assigned to groups typically named for their skillset or area of expertise.

Name BankingCoMainRoutingProfile Required	Description Routing Profile for SuperAgent at BankingCo Required
27 / 127	43 / 250

Settings

Channel settings
Define the channels that can be routed to this group of agents. Set the maximum number of contacts of each type that an agent can handle at one time. Indicate if an agent working on a contact on one channel can be routed new contacts from another channel. [Learn more](#)

<input checked="" type="checkbox"/> Channel availability	Maximum contacts per agent ⓘ	Cross-channel concurrency ⓘ
<input checked="" type="checkbox"/> Voice	1	No other channels while agent is on a Voice contact ▾
<input checked="" type="checkbox"/> Chat	2	No other channels while agent is on a Chat ▾
<input checked="" type="checkbox"/> Task	1	No other channels while agent is on a Task ▾

Routing Profile for an Example Agent

Queues

Assign queue(s) to routing profiles in priority sequence; add delay to give other routing profiles a chance to manage those contacts first. [Learn more](#)

[Delete Queue](#)[Add Queue](#)

<input type="checkbox"/>	Name	Channels	Priority ⓘ	Delay (seconds) ⓘ	<input type="checkbox"/>
<input type="checkbox"/>	Search for queue BankingCoFraudReport	X ▾ <input checked="" type="checkbox"/> Voice <input type="checkbox"/> Chat <input type="checkbox"/> Task	Priority 1	Delay (seconds) 0	<input type="checkbox"/>
<input type="checkbox"/>	Search for queue BankingCoSalesQueue	X ▾ <input checked="" type="checkbox"/> Voice <input checked="" type="checkbox"/> Chat <input checked="" type="checkbox"/> Task	Priority 2	Delay (seconds) 0	<input type="checkbox"/>
<input type="checkbox"/>	Search for queue BankingCoGeneralSupport	X ▾ <input checked="" type="checkbox"/> Voice <input checked="" type="checkbox"/> Chat <input checked="" type="checkbox"/> Task	Priority 2	Delay (seconds) 30	<input type="checkbox"/>

Creating an Example Agent

Edit

Cancel Save

Login	Name (Last, First)	Reset password
X ejackson	Jackson, Eric	Reset password

Rows per page 10 ▾ 1 - 1 of 1 < >

Settings

Security profile BankingCoAgent X ▾ Required

Routing profile BankingCoMainRoutingProfile X ▾ Required

Phone

Phone type Soft phone

Auto-accept calls

After Contact Work (ACW) timeout

Timeout (seconds) The contact won't time out

Setting up for the Flows

Determining Resources and Functions Needed

- Check Holidays
 - Lambda function for Connect Integration
 - DynamoDB Table with List of Holidays
- Verify Customer Pin
 - Lambda function + DynamoDB
- Retrieve Customer Information from “Third-Party” CRM
 - Lambda function + DynamoDB

Building Flows

Check Holidays

- Flow Module
- DynamoDB Table
- Lambda Function
- IAM Policy and Lambda Execution Role

Check Holidays

BankingCoHolidays

Scan or query items

Expand to query or scan items.

Items returned (4)

Date (String)

[2024-07-04](#)

[2024-09-02](#)

[2024-12-25](#)

[2024-11-28](#)

```
1 import json
2 import datetime
3 import boto3
4 import os
5
6 ddb = boto3.client('dynamodb')
7
8 def lambda_handler(event, context):
9
10     today = datetime.datetime.now()
11
12     try:
13         data = ddb.query(
14             TableName=os.environ['TableName'],
15             KeyConditionExpression='#key = :value',
16             ExpressionAttributeValues={
17                 ':value': {
18                     '$': today.strftime("%Y-%m-%d")
19                 }
20             },
21             ExpressionAttributeNames={
22                 '#key': 'Date'
23             }
24         )
25     except Exception as e:
26         print(e)
27         return {"Error": str(e)}
28
29     if data['Count'] != 0:
30         return {"Holiday": "True"}
31     else:
32         return {"Holiday": "False"}
```

BankingCoQueryHolidayTable

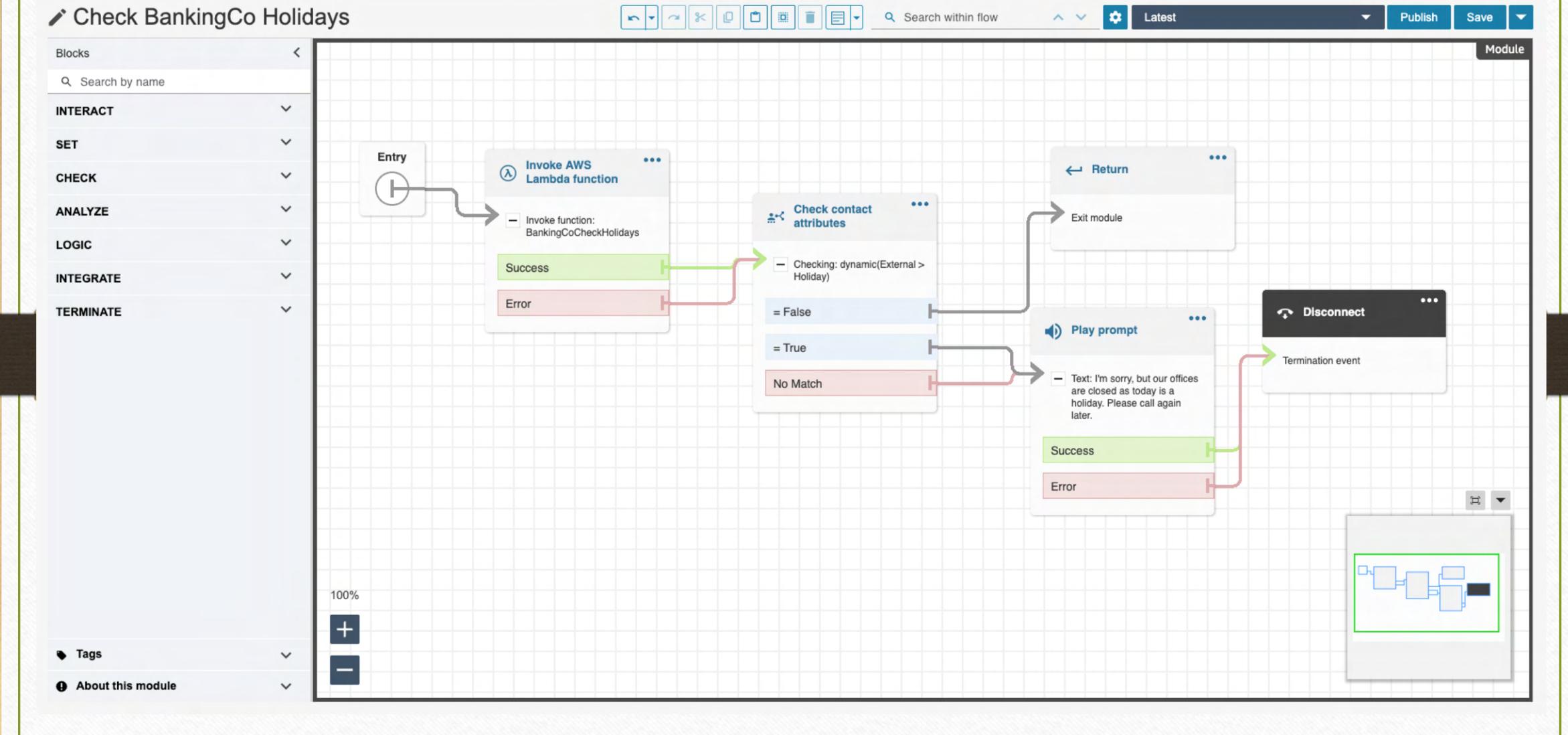
Customer managed

BankingCoQueryHolidayTable

IAM Policy for Lambda function to query Holiday DynamoDB Table

```
1 {
2     "Version": "2012-10-17",
3     "Statement": [
4         {
5             "Sid": "VisualEditor0",
6             "Effect": "Allow",
7             "Action": "dynamodb:Query",
8             "Resource": "arn:aws:dynamodb:us-west-2:101147358634:table/BankingCoHolidays"
9         }
10    ]
11 }
```

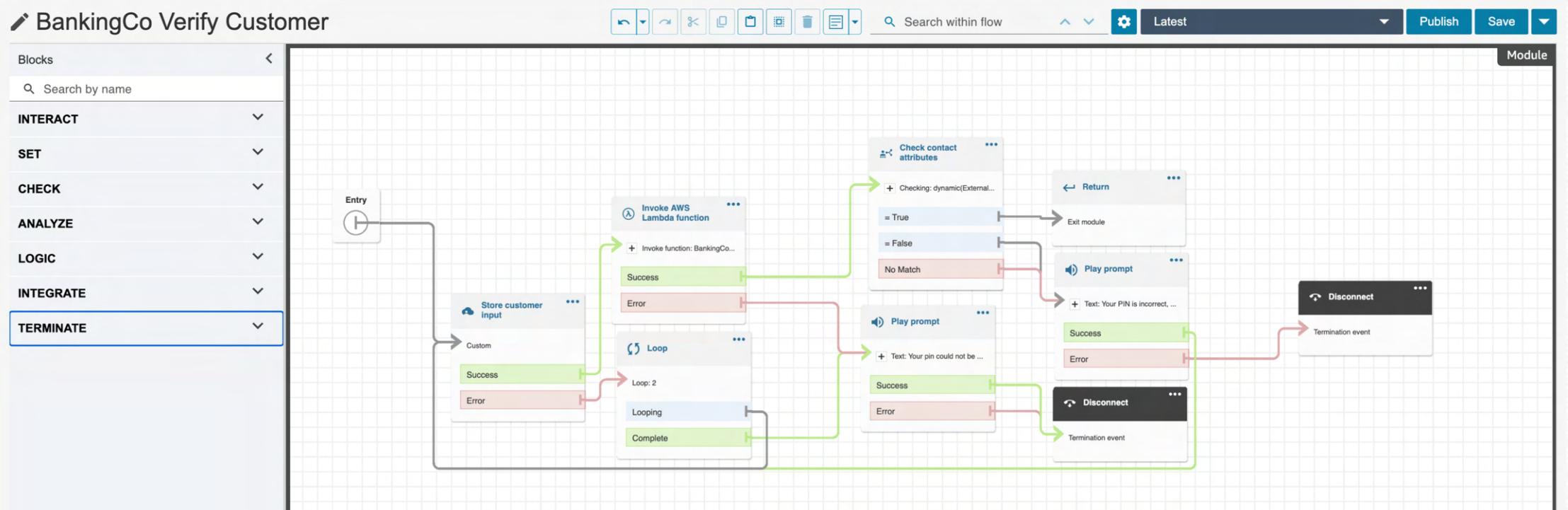
Check BankingCo Holidays



Verify Customer Pin Flow

- Flow Module
- DynamoDB Table (encrypted)
- Lambda Function
- IAM Policy and Lambda Execution Role

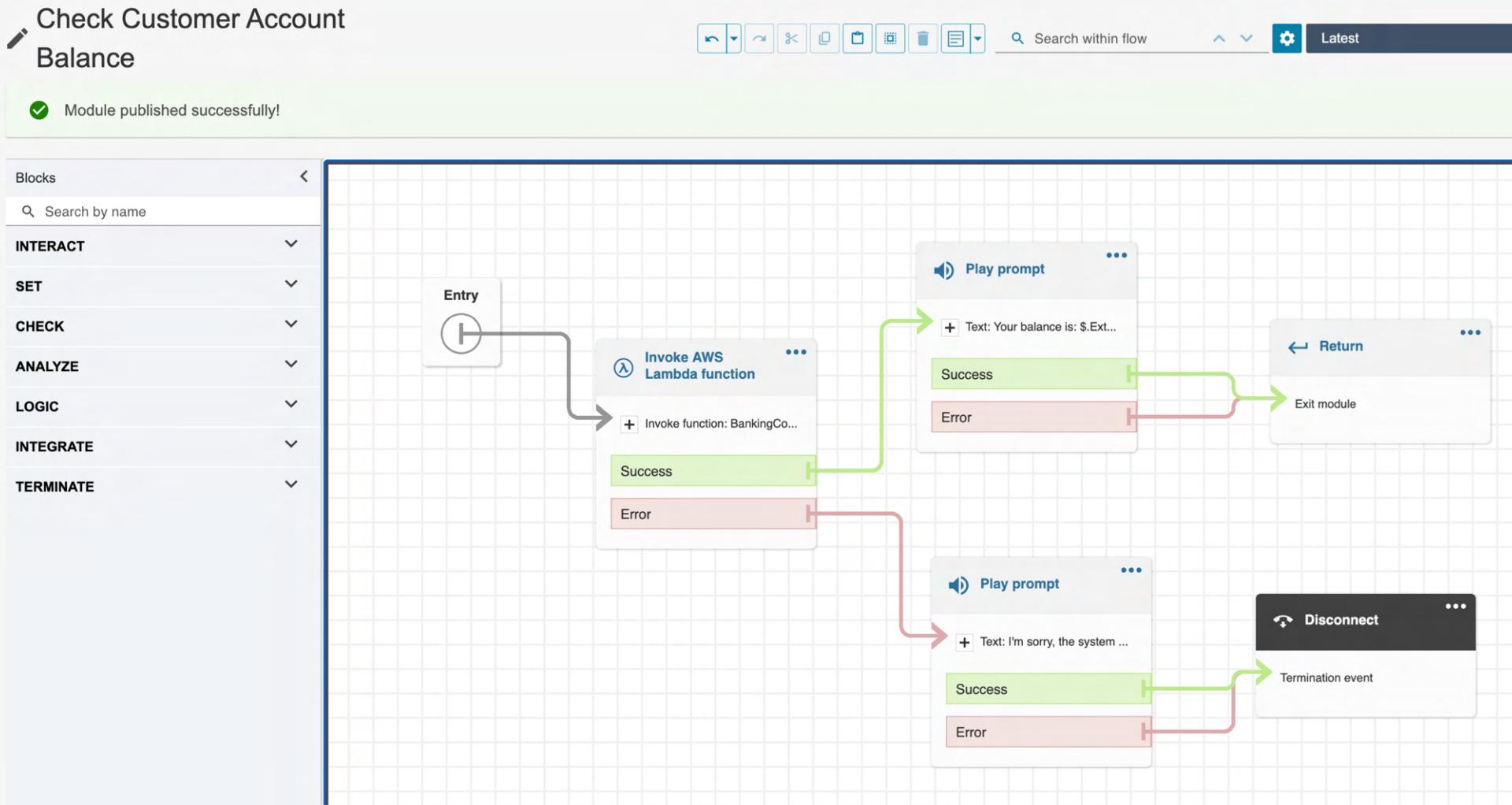
Verify Customer Pin Flow



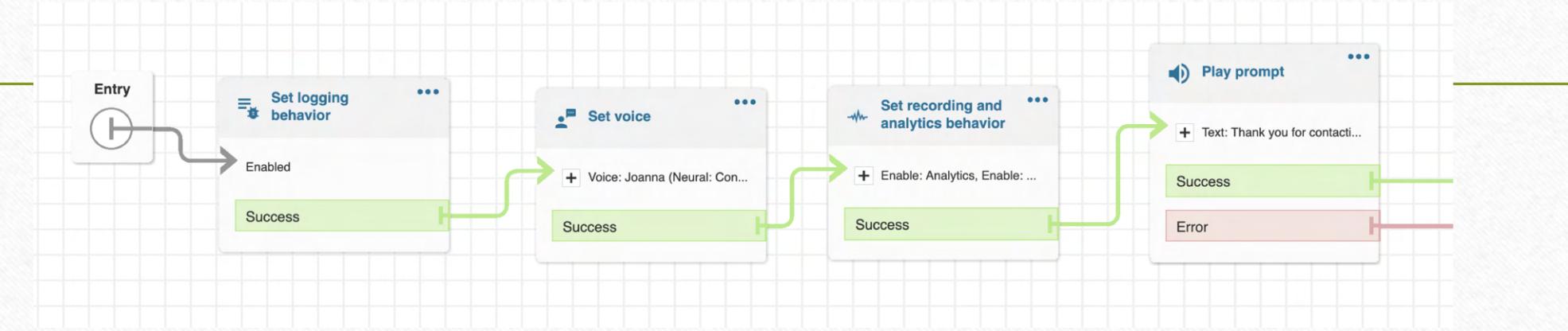
Retrieve Customer Info Flow

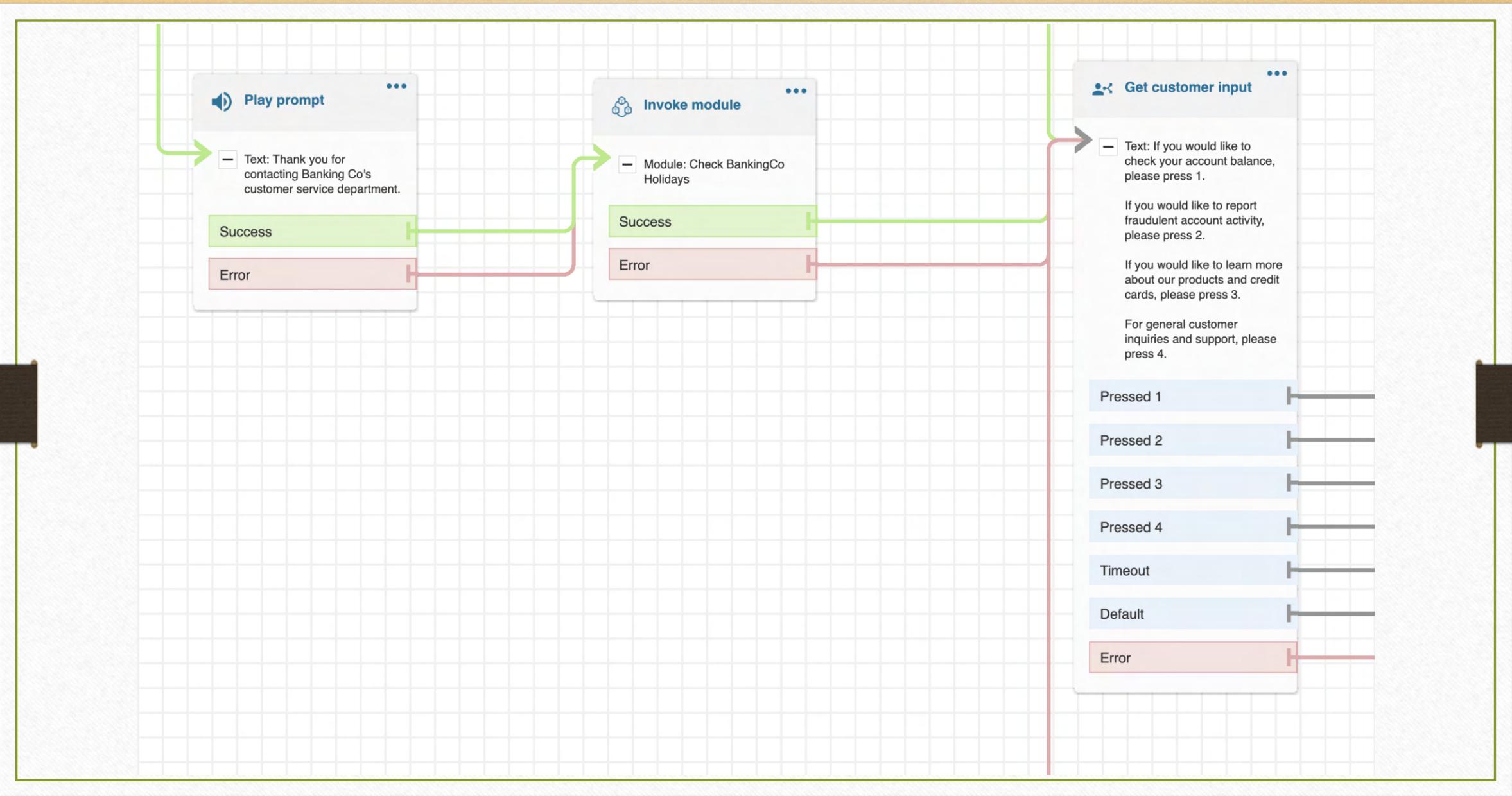
- Flow Module
- DynamoDB Table (encrypted)
- Lambda Function
- IAM Policy and Lambda Execution Role

Retrieve Customer Info Flow

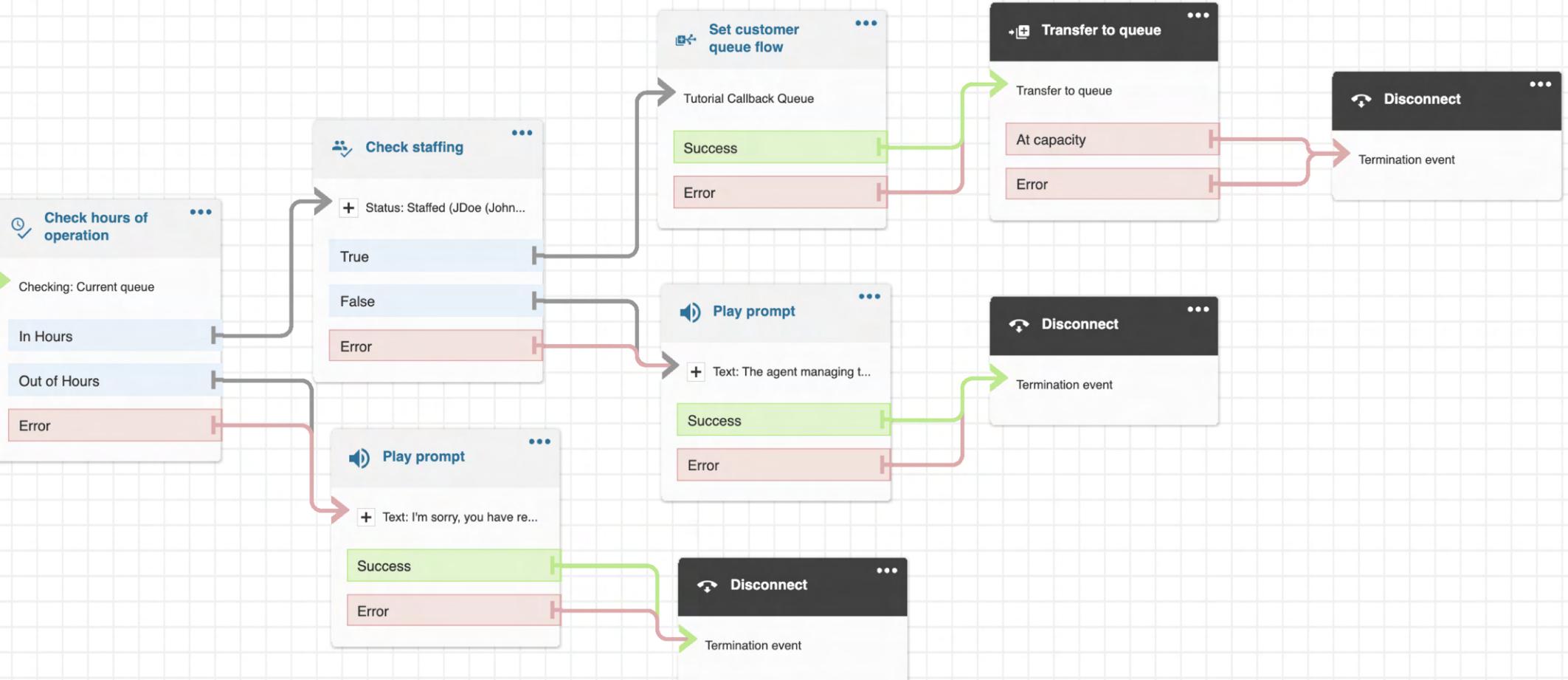


Main Inbound Flow





Contact flow (inbound)



Lex Configuration for Voice and Chat

The screenshot shows the Amazon Lex console interface. On the left, a navigation pane displays a tree structure under 'Get customer input' for the bot 'Lex: BankingCoLexBot (US West: Oregon)'. The intents listed are CheckBalance, ReportFraud, ProductInquiry, GeneralSupport, Default, and Error. The 'Error' intent is highlighted with a red border. In the center, the 'Intents (5)' page is shown with a search bar and a table listing the intents by name. To the right, the 'Sample utterances (7)' page is displayed, showing representative phrases for each intent. A tooltip provides information about generating utterances using Amazon Bedrock.

Intents (5) [Info](#)

An intent represents an action that the user wants to perform.

Search intents

Name
CheckBalance
ReportFraud
ProductInquiry
GeneralSupport
Default
Error
FallbackIntent

Sample utterances (7) [Info](#)

Representative phrases that you expect a user to speak or type to invoke this intent. Amazon Lex extrapolates based on the sample utterances to interpret any user input that may vary from the samples. The priority order of the sample utterances is not used to determine intent classification output.

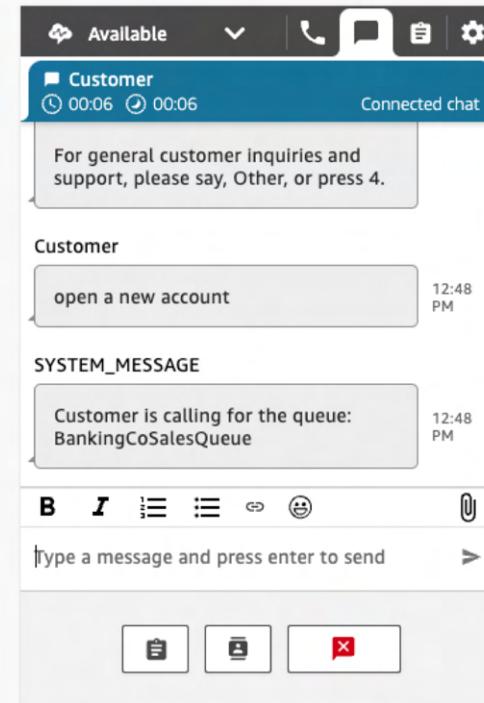
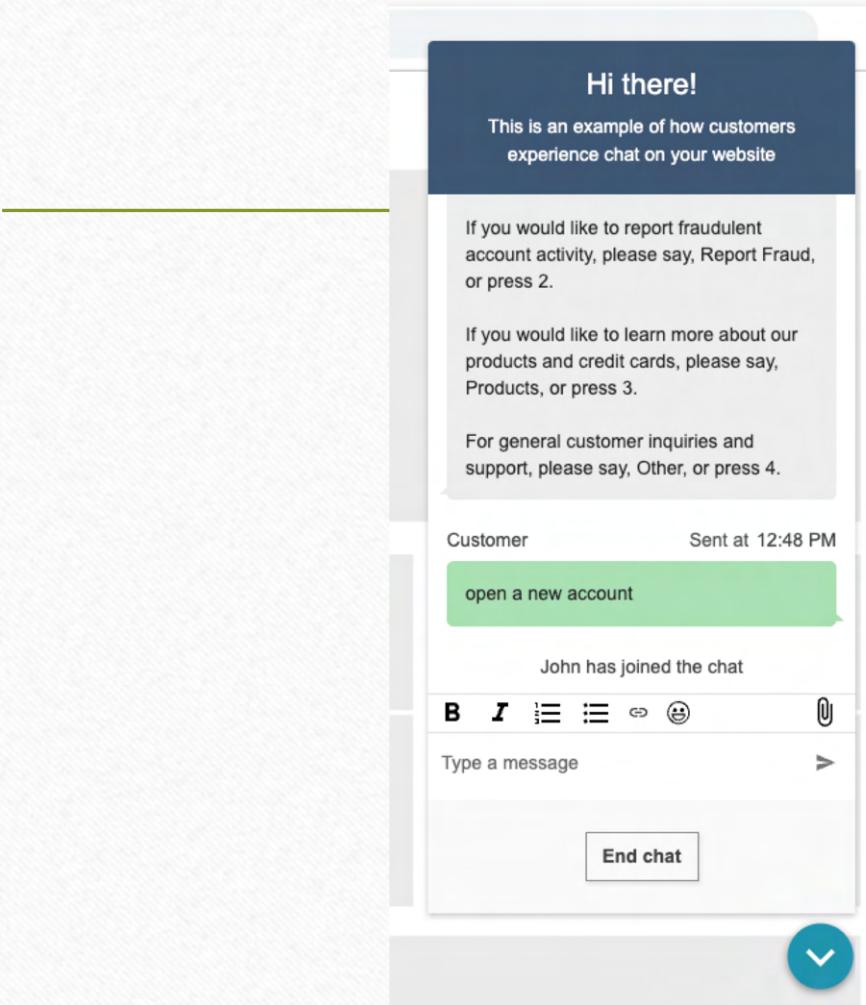
To generate utterances, you must have permissions to Amazon Bedrock. Amazon Lex will make calls to Amazon Bedrock. Additional charges may be incurred based on the usage of Amazon Bedrock. [Learn more](#)

Filter Sort by added (ascending)

[Preview](#) [Plain text](#)

2
Report Fraud
Report Fraudulent Activity
Fraud
Fraudulent Activity
Suspicious activity
report suspicious behavior

Chat Example



Agent Workspaces Screenpop Example

The screenshot illustrates a screenpop integration between a phone call interface and a customer profile page.

Phone Call Interface (Left):

- Top status bar: Available, +1510 [redacted], 00:00:22.
- Call details: +1 510- [redacted] 00:23, Connected call.
- Action buttons: Hold, Unmute, Number pad, Quick connects, Create task.
- Bottom button: End call.

Customer Profile (Right):

- Header: Customer Profile, Cases.
- Customer Information:

First Name: Naruto	Last Name: Uzumaki	Queue: BankingCoFraudReport	Phone Number: +1510- [redacted]
Account Number: 987654321	Account Balance: 5678.9	Customer Tier: Preferred	

Reporting

Historical Reporting - Queues

- AHT – Average Handle Time
- ASA – Average Speed of Answer

Historical metrics: Queues

[Action](#)

Interval	Interval & Time range			Time Zone			
Total	Aug 09, 2024, 12:00 AM - Aug 16, 2024, 12:00 AM			UTC			
Queue	▲	Service level 60 seconds	Service level 120 seconds	Average after contact work time	Average agent interaction time	Average customer hold time	Average handle time
BankingCoGeneralSupport		100.00%	100.00%	00:00:02	00:01:31	-	00:01:34
BankingCoSalesQueue		100.00%	100.00%	00:00:01	00:00:11	-	00:00:12

Sample Contact Trace Record

Contact details

Completed | Last updated: Aug 15, 2024, 06:53:43 pm | 5bbe6b68-[REDACTED] 

Evaluations

Overview

 Voice | Duration: 25 s (Aug 15, 2024, 6:47:51 PM – 6:48:16 PM)

Channel subtype
Telephony

Queue
[BankingCoFraudReport](#)

Agent
JDoe (Doe, John)

Initiation method
Inbound

Disconnect reason
Customer disconnect

Customer phone number
+1510[REDACTED]

Summary

Summary could not be generated due to not enough eligible conversation. [Info.](#)

Evaluation scores

No scored evaluations completed for this contact

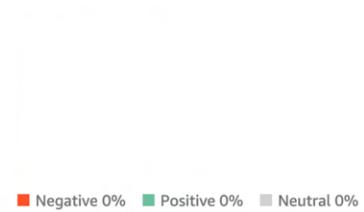
[Learn more !\[\]\(e928390791d3233bbc76e7bbff7df0d7_img.jpg\)](#)

Conversational analytics

Customer sentiment trend



Customer sentiment



Talk time



Overall customer sentiment

0

Overall agent sentiment

0

Customer talk time

00:00:00

Agent talk time

00:00:00

Conversation duration ⓘ

00:00:00

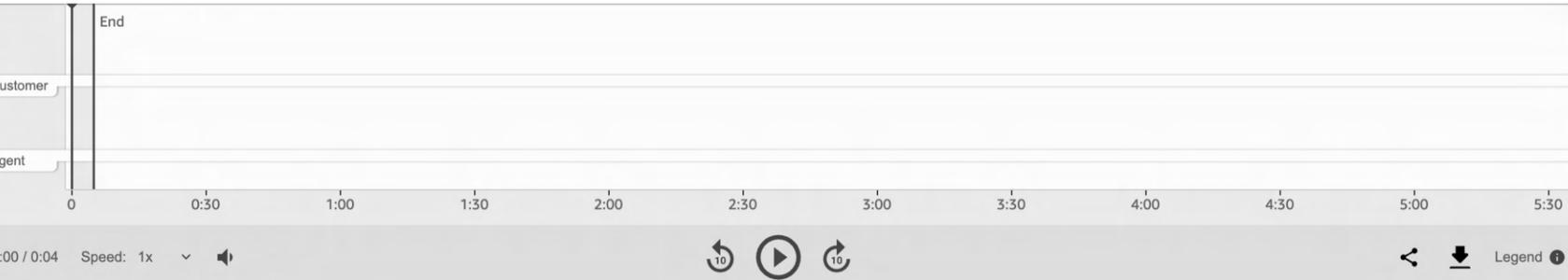
Longest non-talk time

00:00:00

Total non-talk time

00:00:00

Recording and transcript



Categories

No categories found

No transcript to show

Sample Contact Trace Record

Connection

Connected at	Aug 15, 2024, 06:47:51 pm
Customer endpoint	+1510 [REDACTED]
System endpoint	+1206 [REDACTED]

Queue

Queue	BankingCoFraudReport
Duration	00:00:11
Enqueued at	Aug 15, 2024, 06:48:00 pm
Dequeued at	Aug 15, 2024, 06:48:12 pm
Agent connection attempts	1

Agent

Name (last, first)	Doe, John
Username	JDoe
Connected to agent at	Aug 15, 2024, 06:48:12 pm
Interaction duration	00:00:04
Hold duration	00:00:00
Number of holds	0
Longest hold	--:--:--
ACW start	Aug 15, 2024, 06:48:16 pm
ACW end	Aug 15, 2024, 06:49:01 pm
ACW duration	00:00:44
Routing profile	BankingCoMainRoutingProfile

As-Built Architecture Diagram

