

# BankingCo Amazon Connect Demo

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# Demo Agenda

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

# Preparing the Connect Instance

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# Determine the Queues

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- 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

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<input type="checkbox"/> <a href="#">BankingCoAgent</a>	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	27 / 127

Description	Routing Profile for SuperAgent at BankingCo
Required	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](#)

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 ▾

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# 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	<a href="#">Reset password</a>

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

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# Setting up for the Flows

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# Determining Resources and Functions Needed

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- 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

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# Check Holidays

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- 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

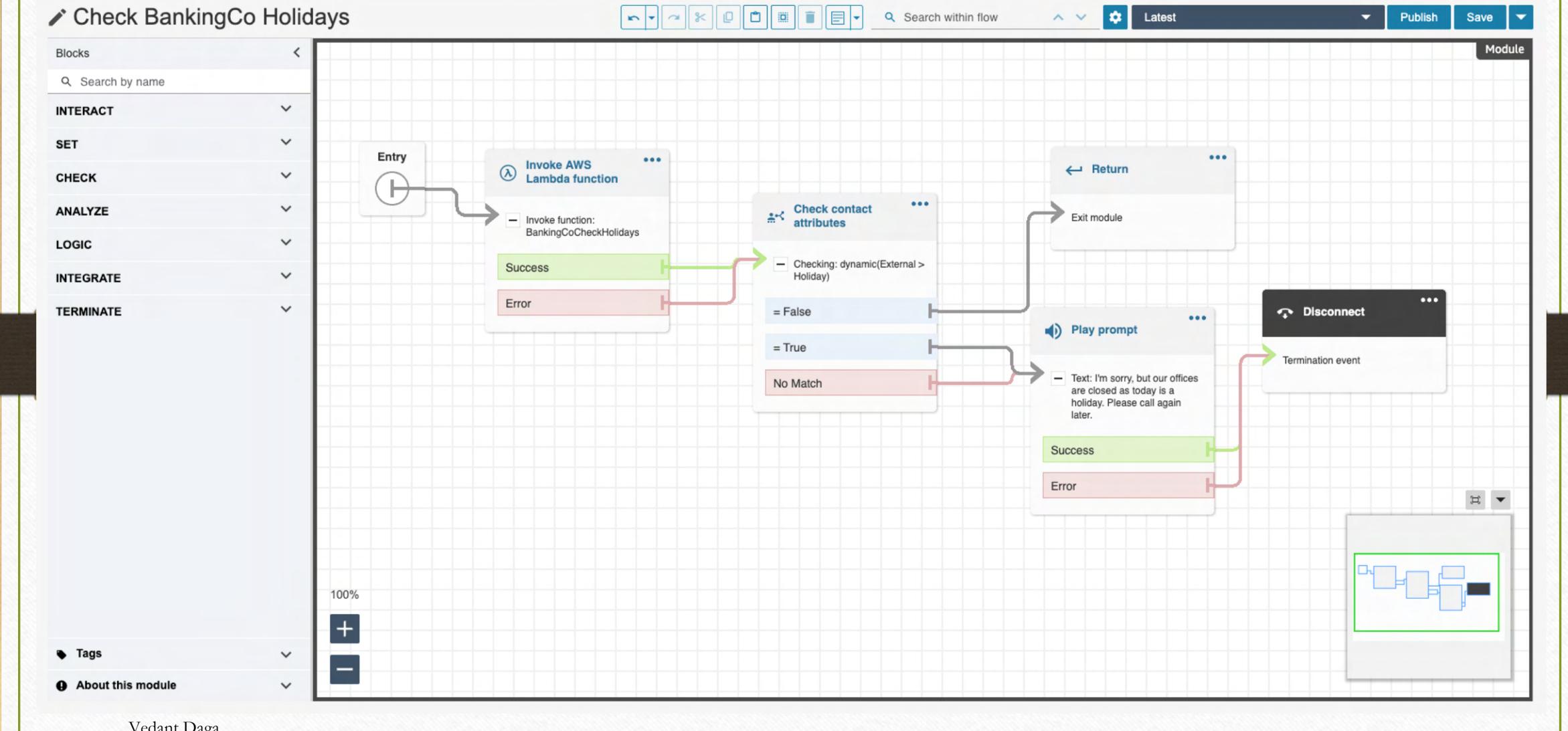
```
1 import json
2 import datetime
3 import boto3
4 import os
5
6 ddb = boto3.client('dynamodb')
7
8 def lambda_handler(event, context):
9
10     today = datetime.datetime.now()
11
12     try:
13         data = ddb.query(
14             TableName=os.environ['TableName'],
15             KeyConditionExpression="#key = :value",
16             ExpressionAttributeValues={
17                 ':value': {
18                     'S': 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

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



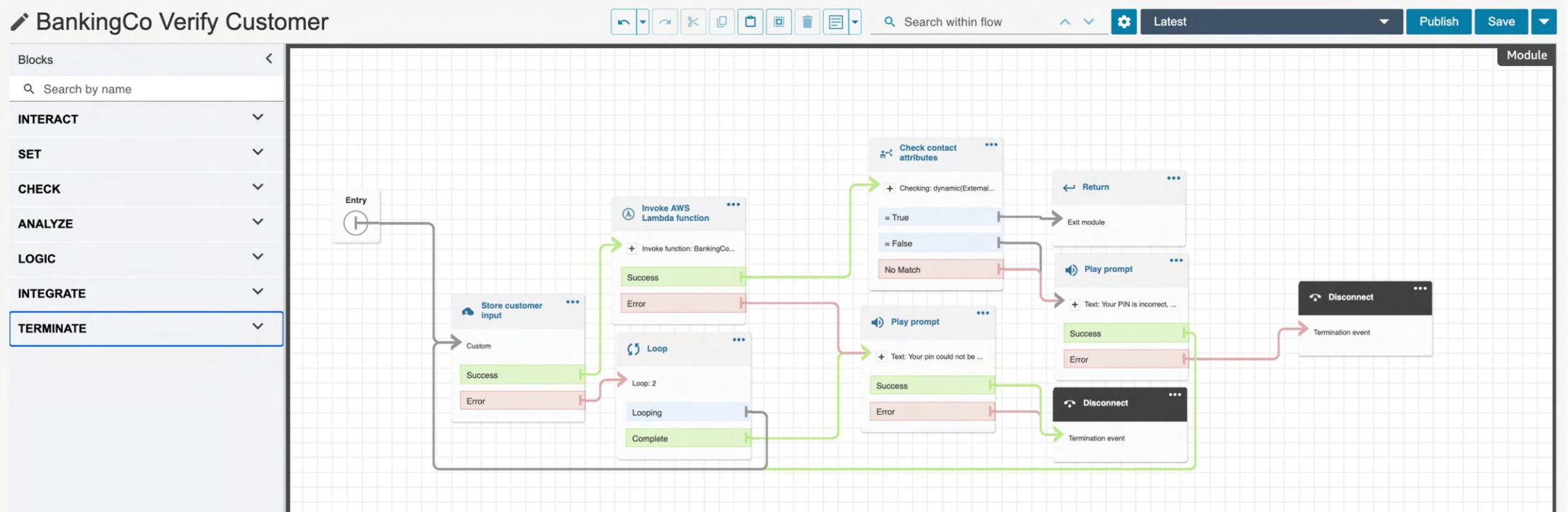
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# Verify Customer Pin Flow

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

# Verify Customer Pin Flow



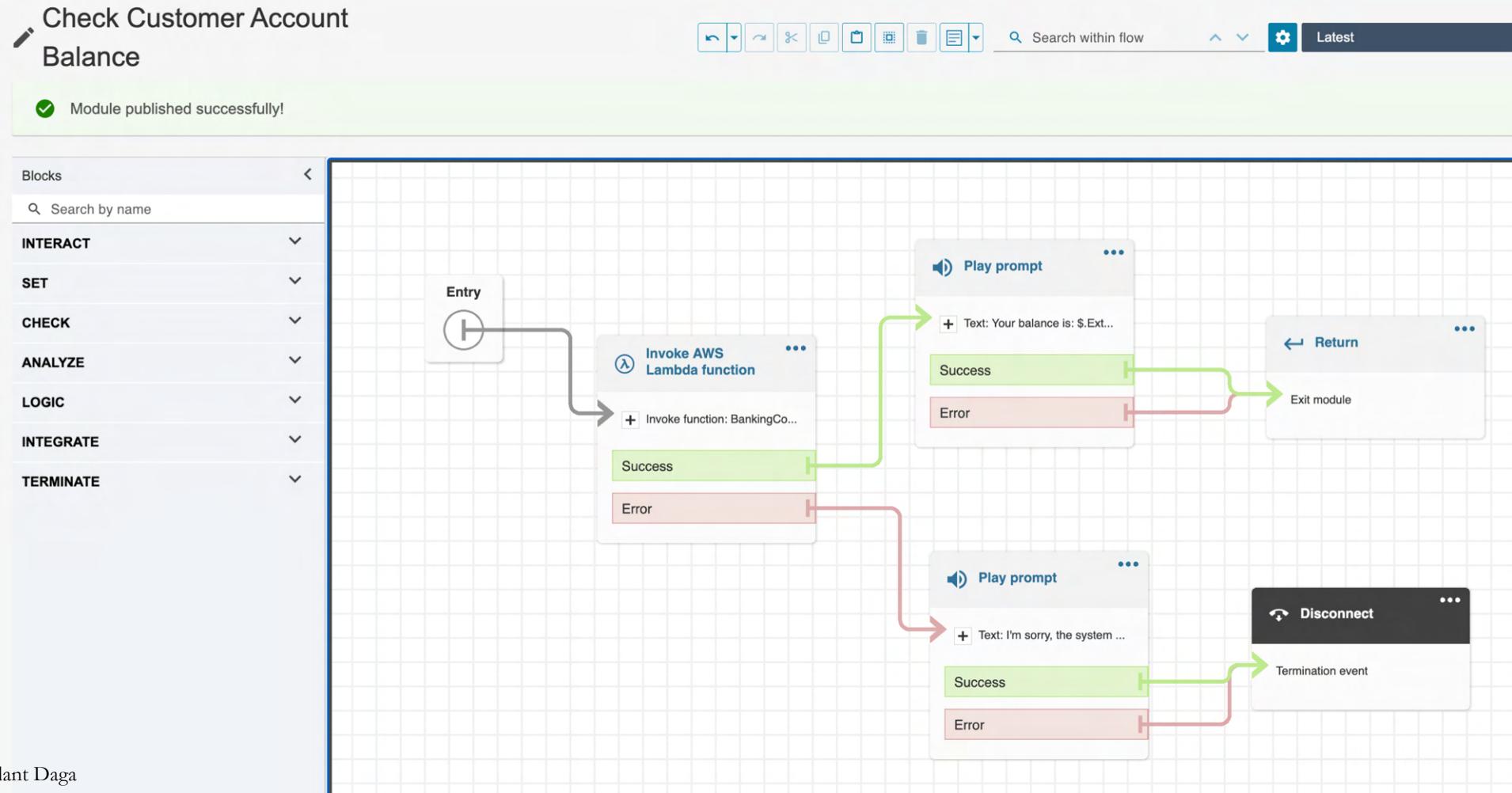
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# Retrieve Customer Info Flow

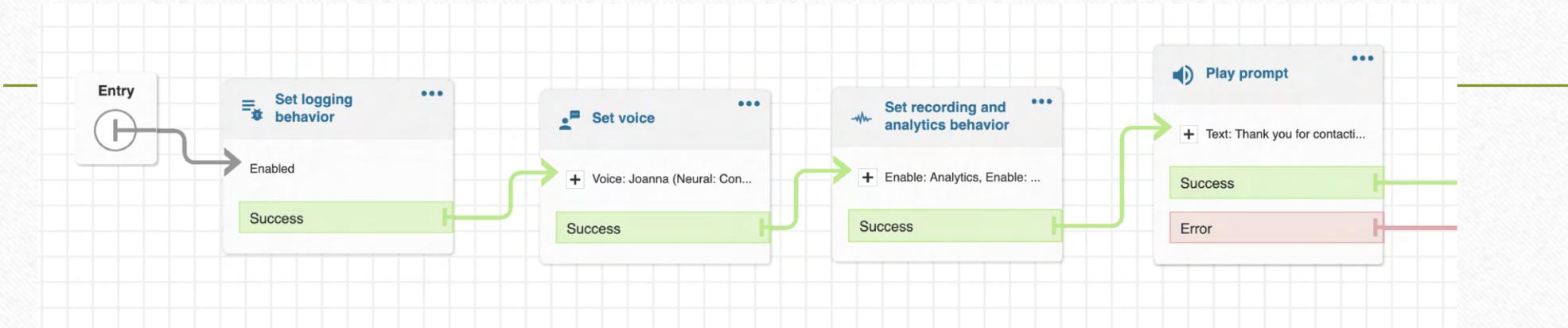
---

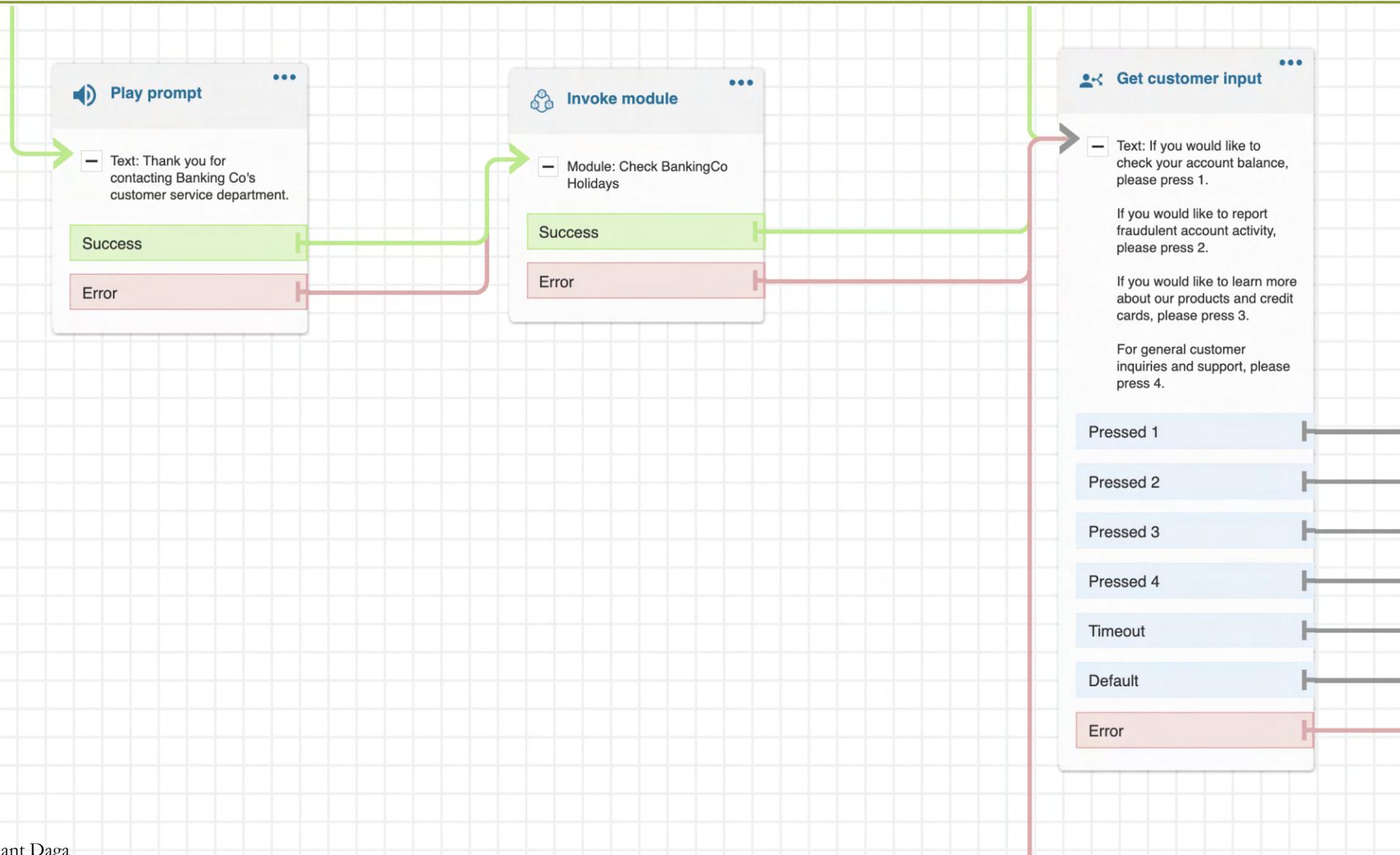
- Flow Module
- DynamoDB Table (encrypted)
- Lambda Function
- IAM Policy and Lambda Execution Role

# Retrieve Customer Info Flow

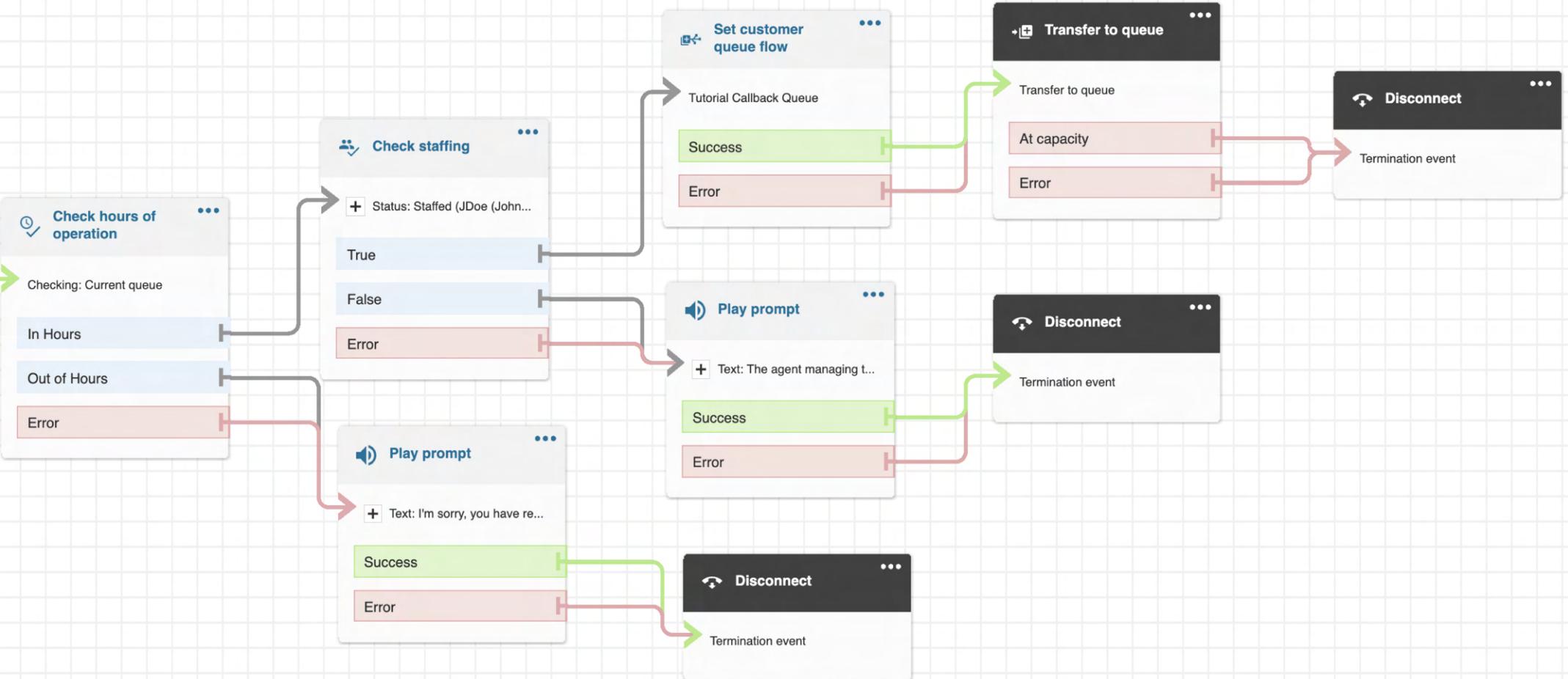


# Main Inbound Flow





### Contact flow (inbound)



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# Lex Configuration for Voice and Chat

The screenshot shows the Amazon Lex console interface. On the left, a navigation pane lists intents: Get customer input, CheckBalance, ReportFraud, ProductInquiry, GeneralSupport, Default, and Error. The Error intent is highlighted with a red border. The main area displays the Intents (5) page with a search bar and a table listing intents by name. The table includes columns for Name and a preview section. The preview section shows sample utterances for each intent. A sidebar on the right provides information about sample utterances, including a note about generating utterances for Amazon Bedrock.

**Intents (5)** [Info](#)

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

**Name**

	Name
<input type="radio"/>	<a href="#">CheckBalance</a>
<input type="radio"/>	<a href="#">ProductInquiry</a>
<input type="radio"/>	<a href="#">GeneralSupport</a>
<input type="radio"/>	<a href="#">ReportFraud</a>
<input type="radio"/>	<a href="#">FallbackIntent</a>

**Sample utterances (7)** [Info](#) [What's this?](#) [Generate utterances](#)

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.

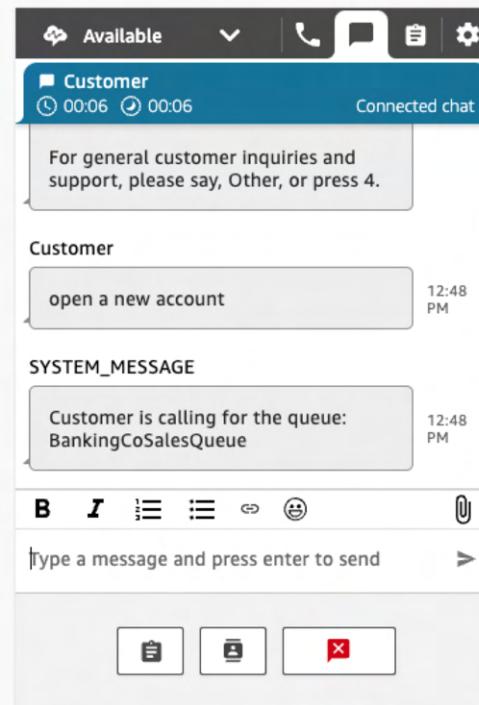
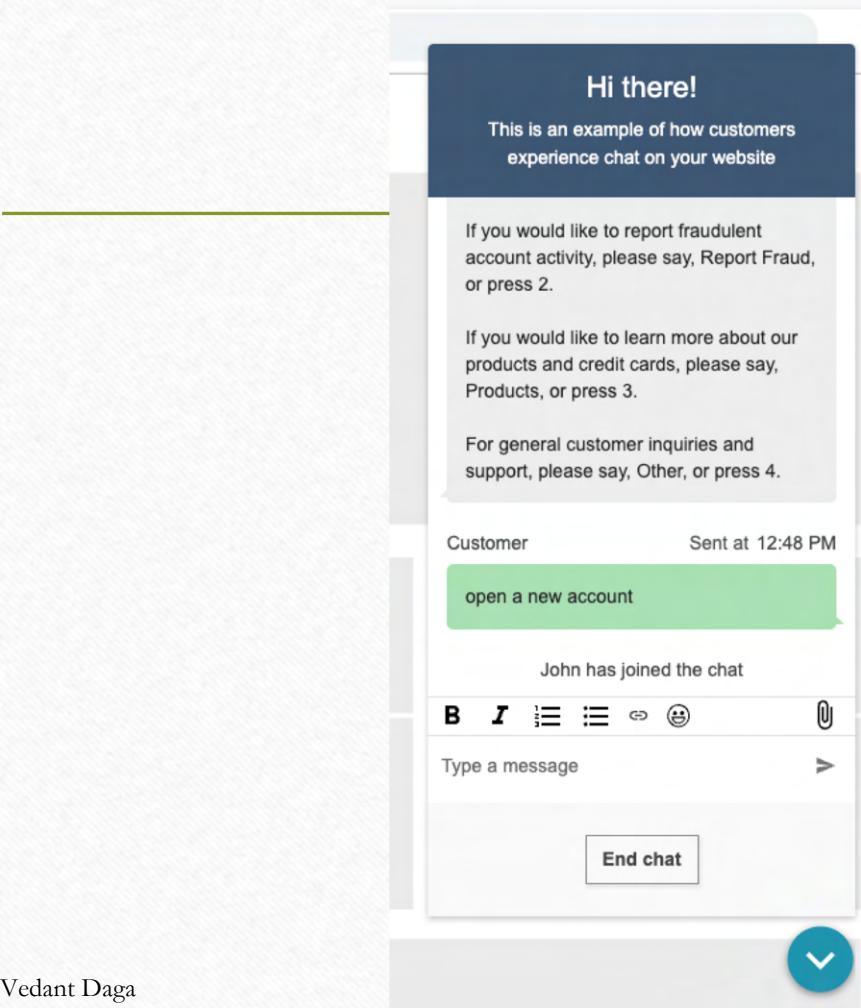
To generate utterances, you must have permissions to Amazon Bedrock. Amazon Lex will make calls to Amazon Bedrock. Additional charges may be incurred based on the usage of Amazon Bedrock. [Learn more](#)

**Preview** **Plain text**

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

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# 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.
- Control buttons: Hold, Unmute, Number pad, Quick connects, Create task, End call.

**Customer Profile (Right):**

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

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

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# Reporting

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# 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

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# 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

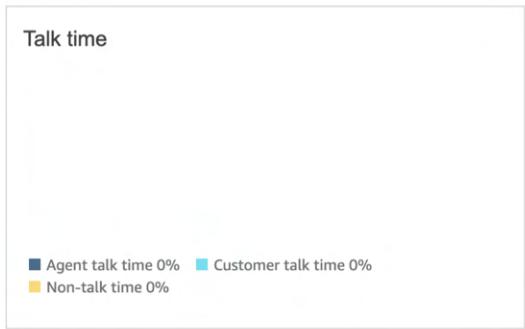
Summary could not be generated due to not enough eligible conversation. [Info.](#)

### Evaluation scores

No scored evaluations completed for this contact

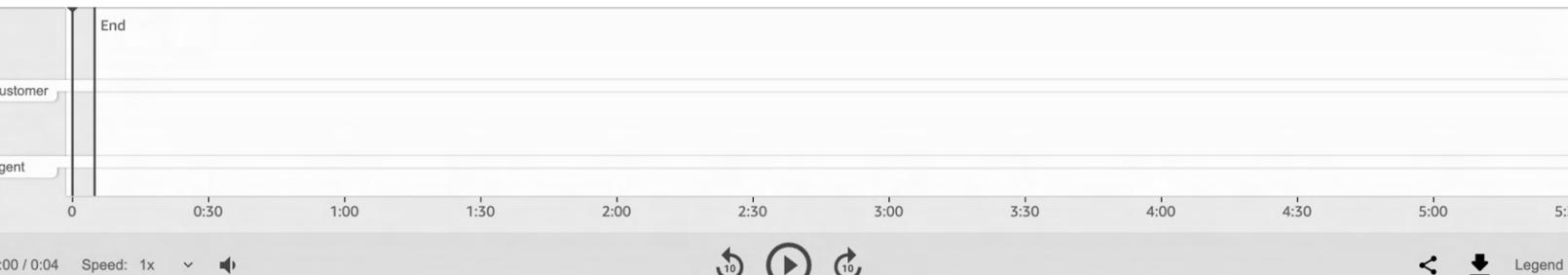
[Learn more](#) 

## Conversational analytics



Overall customer sentiment	0	Customer talk time	00:00:00	Conversation duration <small>?</small>	00:00:00
Overall agent sentiment	0	Agent talk time	00:00:00	Longest non-talk time	00:00:00

## Recording and transcript



## Categories

No transcript to show

# Sample Contact Trace Record

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## 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

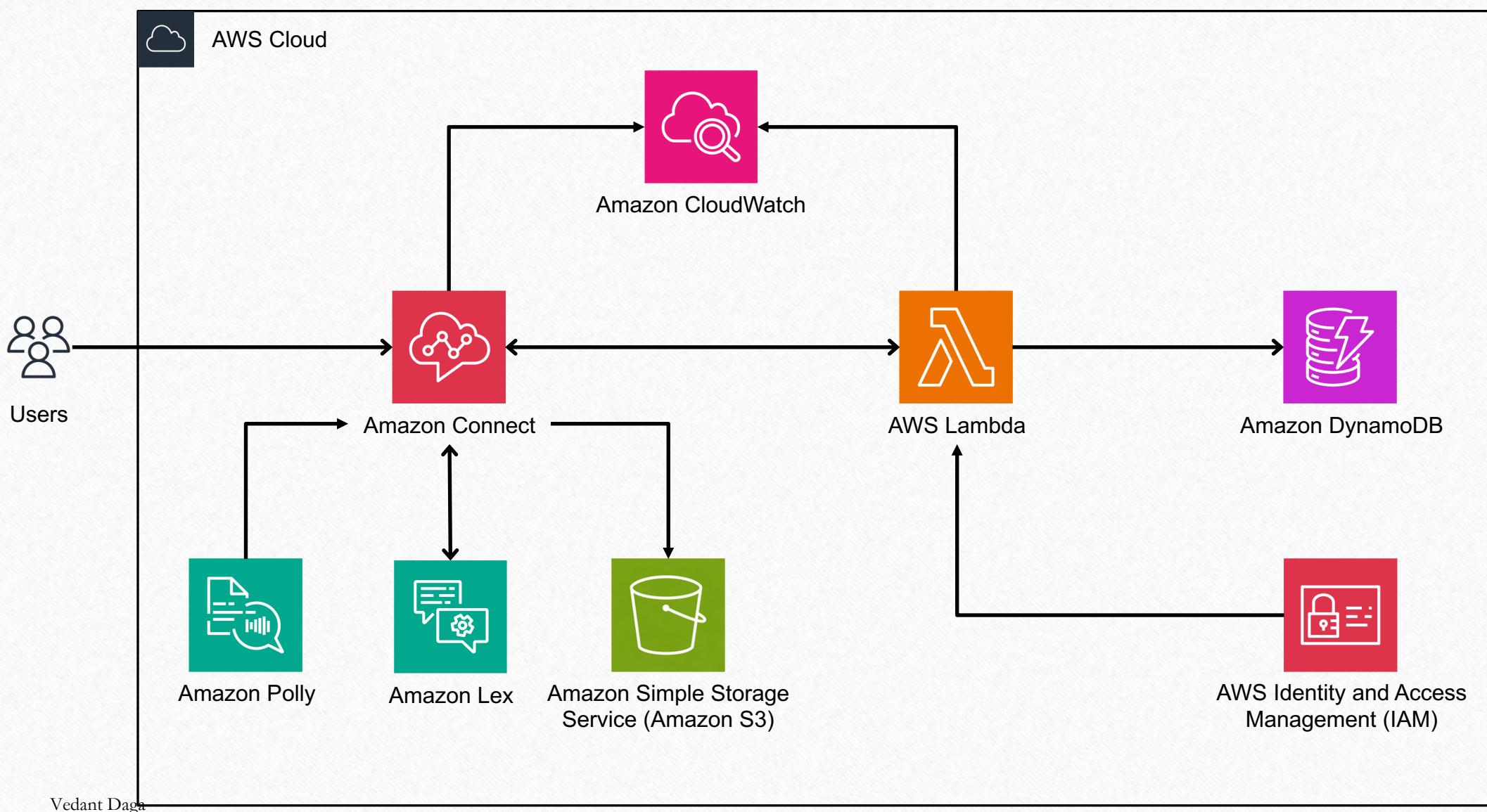
## Agent

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

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# Development Opportunities

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- Add support for multiple languages
- Enable Task routing and creation
- Establish Quick Connects to transfer calls between departments/agents
- Integrate a knowledge domain for Amazon Q
- Integration for BI reporting – using RedShift warehouse or QuickSight

# Q&A

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