

AWS State, Local, and Education Learning Days

Boston, MA



Amazon Connect

Increase productivity and satisfaction with an intelligent contact center

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Agenda

- Amazon Connect Overview
- Contact Lens
- Amazon Q in Connect



Amazon Connect

One application. One seamless experience.

TENS OF THOUSANDS
OF CUSTOMERS

MORE THAN 10 MILLION CONTACT
CENTER INTERACTIONS A DAY

USED BY +100,000 AMAZON
CUSTOMER SERVICE ASSOCIATES

Amazon Connect differentiators

SIMPLE-TO-USE CLOUD CONTACT CENTER



Built from the ground up as a single solution



Pay only for what you use

Globally redundant telephony +30 providers, +85 inbound, and +230 outbound countries

Instant access to **+200 fully featured AWS services**



Built from the ground up to accelerate your CX innovation

TAKE CONTROL OF AN ENTERPRISE GRADE CONTACT CENTER WITH JUST A FEW CLICKS



Self-service

Take control from day one and make changes fast

- Get started in 5 minutes, with an enterprise grade contact center and global telephony
- Powerful UI and API lets you make changes instantly

- Test, dial up, and deploy features at will, only paying for what you use
- Iterate on demand with built in A/B testing

True omnichannel

Unify your experiences and maximize people

- Configure a customer journey and deploy across all channels instantly—no duplicate effort
- One automation engine (e.g., IVR, Chatbot, tasks)

- One agent experience
- One routing & skills engine
- One data, analytics, and optimization engine

Native data and AI

Drive real world results

- Access data in one place with no walled gardens: your data is your data
- AI conversational and real time journey analytics

- AI-driven agent and manager assist
- AI-driven quality management, forecasting, and agent scheduling

One vendor solution

Enable solutions with clicks not integrations—native, not cobbled together

- Agent optimization suite
- Customer profiles
- Case management

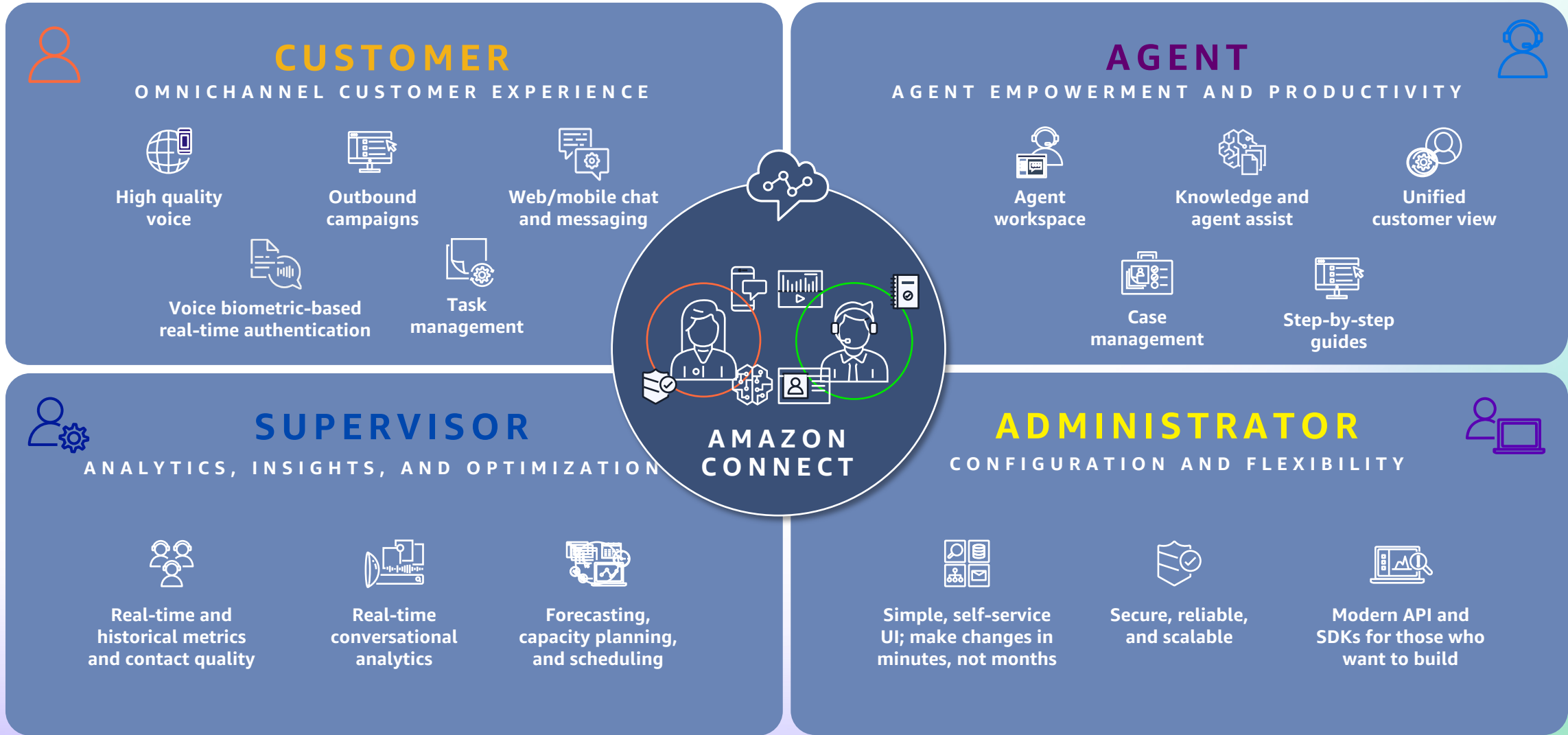
- Tasks to track all agent and back-office work
- Proactive outbound
- Voice authentication

Flows

Powerful IVR, chatbot, agent and task automation

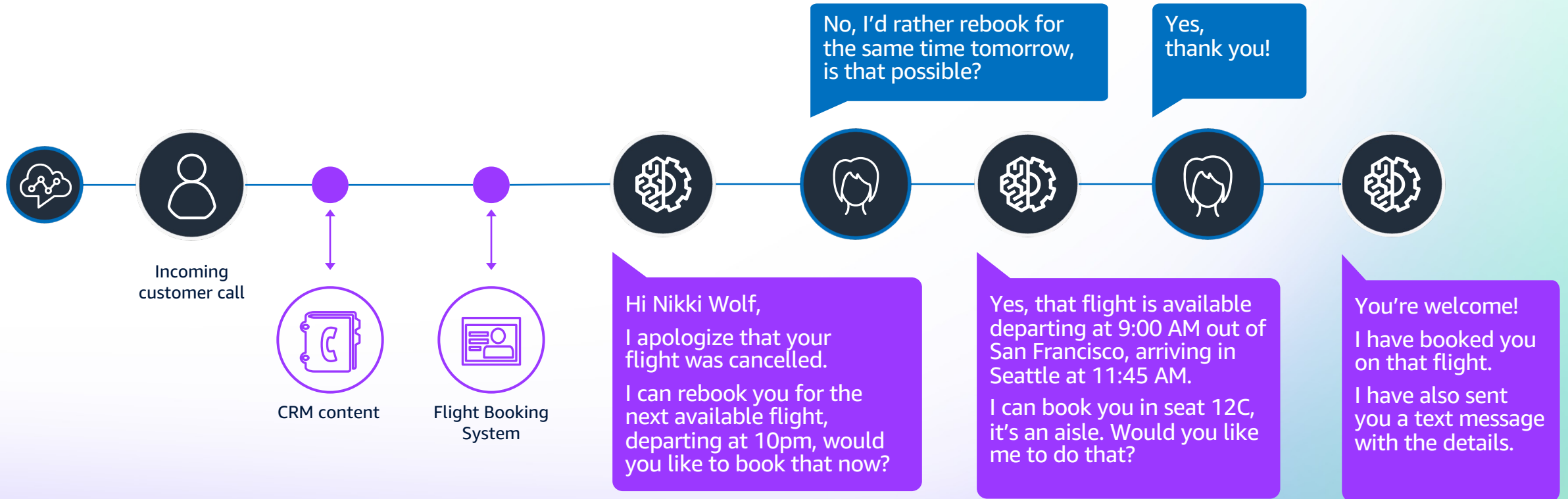
- One flow language, drag-and-drop editor, and engine for all channels
- Native Natural Language understanding

- Agent step-by-step guides
- Flow analytics to optimize and iterate
- Reusable modules, versioning, and change control



ONE APPLICATION. ONE SEAMLESS EXPERIENCE.

Customer Experience



PERSONAL

Amazon Connect Flows adapt on a per customer basis

DYNAMIC

Answer customer questions before they are even asked

NATURAL

Amazon Connect chatbots use the same technology that powers Alexa

OMNICHANNEL

Amazon Connect SMS provides assistance on channel of choice

Agent experience

AMAZON CONNECT AGENT WORKSPACE



The screenshot displays the Amazon Connect Agent Workspace interface. At the top, the agent's status is 'Available' and the name is 'Nikki Wolf'. The main workspace is divided into several sections:

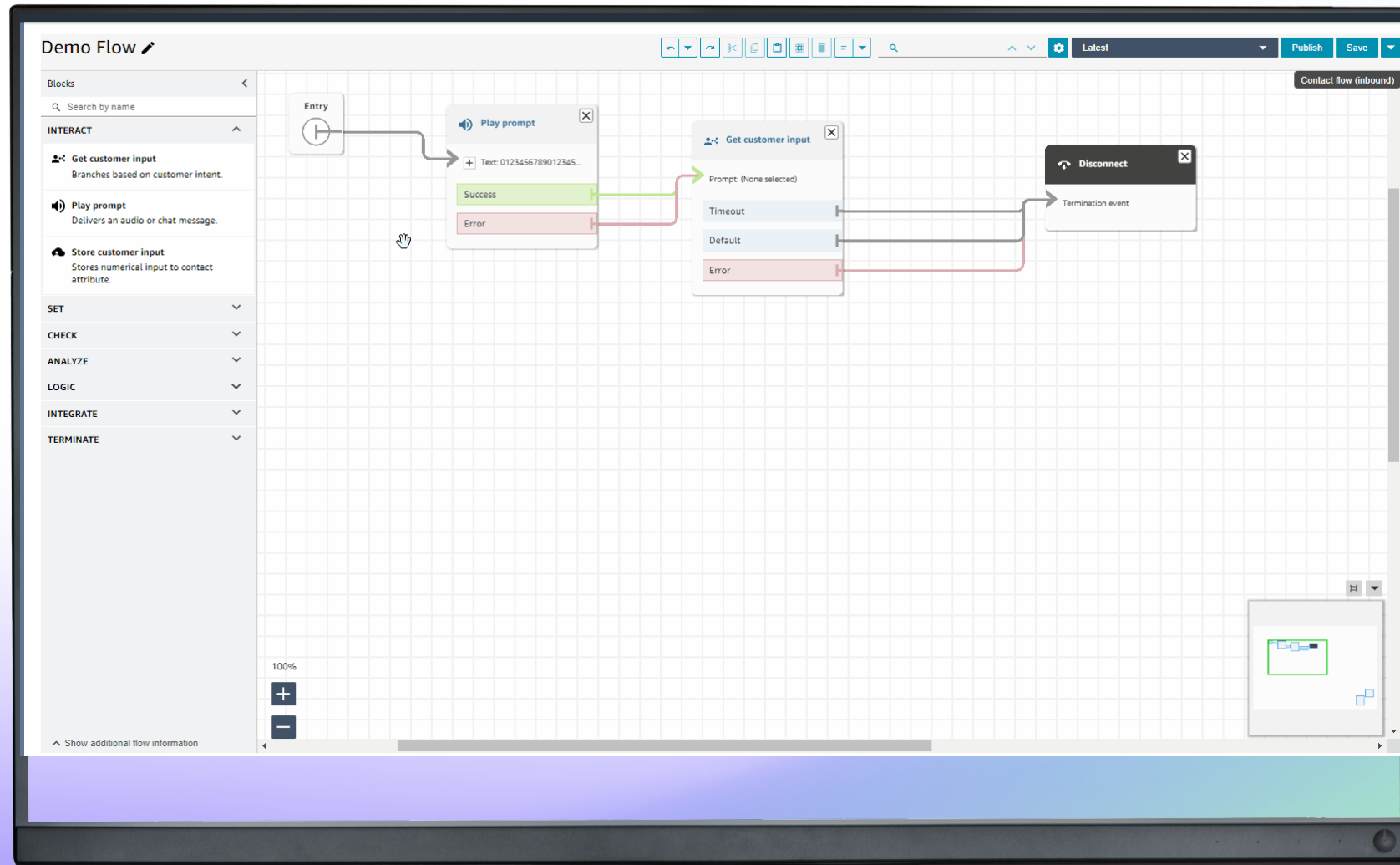
- Chat History:** Shows a conversation with a Virtual Assistant. The assistant asks for a one-time password, and the agent responds with '1234'. The assistant then provides information about a credit limit increase and a travel rewards card offer. The agent requests to talk to an agent.
- Case Summary:** A card titled 'Fraud activity - transaction declined' with a summary and a table of details.

Summary		
Silver card was declined for a charge of \$550 at Example Corp Travel on 11/28/23. The customer has been contacted to review this activity.		
Reference ID XYZ1234567	Customer name Nikki Wolf	Contact email nikki_wolf@example.com
Creation date November 28, 2023	Last updated November 28, 2023	Contact phone 1 212-555-5400
Assigned queue Transaction Support	Assigned user John Stiles	Account number 233455
Card currently locked Yes	Date of transaction November 28, 2023	Tenure of membership 10 years 3 months
Transaction amount \$550	Vendor of transaction Example Corp Travel	Case status Open
- Next Steps:** A card titled 'New case - transaction declined' with a 'Make payment' button and a card icon. Another card shows 'Next payment due on 12/22/23' with a 'Make payment' button and a card icon.
- Offers:** A card titled 'Security' with an 'Unlock Card' button and a card icon. Another card titled 'Offers' with an 'Apply for a new credit card' button and a card icon.

The bottom of the interface features a chat input field with a text area and a 'Type a message and press enter to send' prompt, along with an 'End chat' button.

Administrator experience

WORKFLOW BUILDER, OMNICHANNEL & SKILLS-BASED ROUTING, RULES ENGINE, AND MORE



Contact Lens

Contact Lens for Amazon Connect

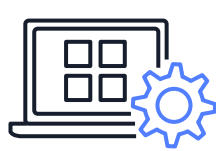
Out-of-the-box experience enabled contact centers and their staff to use the power of ML with just a few clicks



Advanced
search



Detailed
analytics and
sentiment
analysis



Automated
contact
categorization



Call
summarization



Real time
supervisor
alert



Sensitive data
redaction

Use Case - Identify critical issues in real-time

Real-time metrics

Agents

Time range: trailing previous 2 hours

Agent login	Channels	Agents					Contacts				
		Activity	Duration	Agent hierarchy	Routing profile	Capacity	Active	Availability	State	Duration	Queue
loginname_a	All channels	On contact	01:15:01	US/ West/ Dept A	RP name A	3	1	0	-	-	-
	Voice					1	0	0	Connected	00:05:18	Queue name
	Escalation, Angry customer					0	0	-	-	-	-
loginname_b	Voice	On contact	00:02:32	US/ West/ Dept A	RP name B	1	1	0	Connected	00:04:39	Queue name
loginname_c	All channels	On contact	00:28:13	US/ West/ Dept A	RP name B	2	0	1	-	-	-
	Voice					0	0	0	Connected	-	-
	Chat					0	0	-	-	-	-
loginname_d	Chat total	On contact	00:24:01	US/ West/ Dept A	RP name A	2	2	0	-	-	-
	Chat					1	0	0	Connected	00:01:01	Queue name
	Chat					1	0	0	Connected	00:12:45	Queue name
loginname_e	All channels	On contact	00:13:30	US/ West/ Dept A	RP name C	2	2	0	-	-	-
	Voice					0	0	-	-	-	-
	Chat total					2	0	-	-	-	-
	Chat					1	0	0	Connected	00:11:56	Queue name
loginname_f	All channels	On contact	01:07:52	US/ West/ Dept A	RP name a	3	1	0	-	-	-
	Voice					1	0	0	Connected	00:03:12	Queue name
	Chat total					0	0	-	-	-	-

Rows per table: 50 1-32 of 100

New table

- Get alerted to real-time issues when a customer conversation matches your predefined rules
- Listen in or review live call transcript to decide whether a call transfer is needed

Use Case - Simplify call transfers

The screenshot displays a call center interface with three main sections:

- Metadata:** Shows 'Contact Id', 'Channel' (Voice), and 'Customer sentiment' (represented by a green progress bar).
- Categories:** Lists 'Proper-Greeting' as a detected category.
- Transcript:** Shows a message from the 'Agent' at 00:00: 'Hello. Thanks for calling XYZ Company. My name is John Doe. Let's start with your date of birth, and please verify your address for me please.' with a green smiley face icon. The 'Customer' response is shown at 00:13.

- Pass call transcript containing customer sentiment, matched categories, and detected issue from one agent to another
- Reduce the need for customers to repeat themselves during call transfers

Use Case - Manage policy and regulatory compliance

When

A Contact Lens post-call analysis is available

If all of these conditions are met

Words or phrases - Exact match
Limit: 100 words or phrases total for the rule

Logic: Any of the following words or phrases were not mentioned during the first 30 seconds of the contact, where speaker is agent

Enter keywords or phrases. Comma separate multiples entries. Add

Keywords or phrases	
thank you for being a gold member	
thank you for being a valued customer	

- Track adherence to call scripts (e.g., greetings)
- Ensure regulatory requirements are being followed (e.g., disclaimers)

Use Case - Improve handling of sensitive customer data

```
{
  "ParticipantId" : "33333333",
  "Id" : "sssssssss-ssss-ssss-ssss-sssssssss",
  "Content": "My email id is [PII].", //This shows that the customer's email ID has been redacted.
  "BeginOffsetMillis" : 500,
  "EndOffsetMillis" : 945,
  "Sentiment" : "NEGATIVE",
  "LoudnessScore": [
    40.5,
    55.0,
    59.3
  ],
}
```

- Redact customer data such as names, addresses, credit card details, and social security numbers
- Hide sensitive information in the call transcript and silence it in the audio recording

Use Case - Find agent coaching opportunities

The screenshot displays the 'Contact search' interface. At the top, a message box states: 'The contact search page has a brand new experience. Now you can select your search timeframe by the hour. You can use multi-select for agent names, contact queues, contact flows, and more. Also, we've extended the time range of search from two weeks to eight weeks. The previous version of the contact search page is still available for a limited time. [Learn more.](#)'

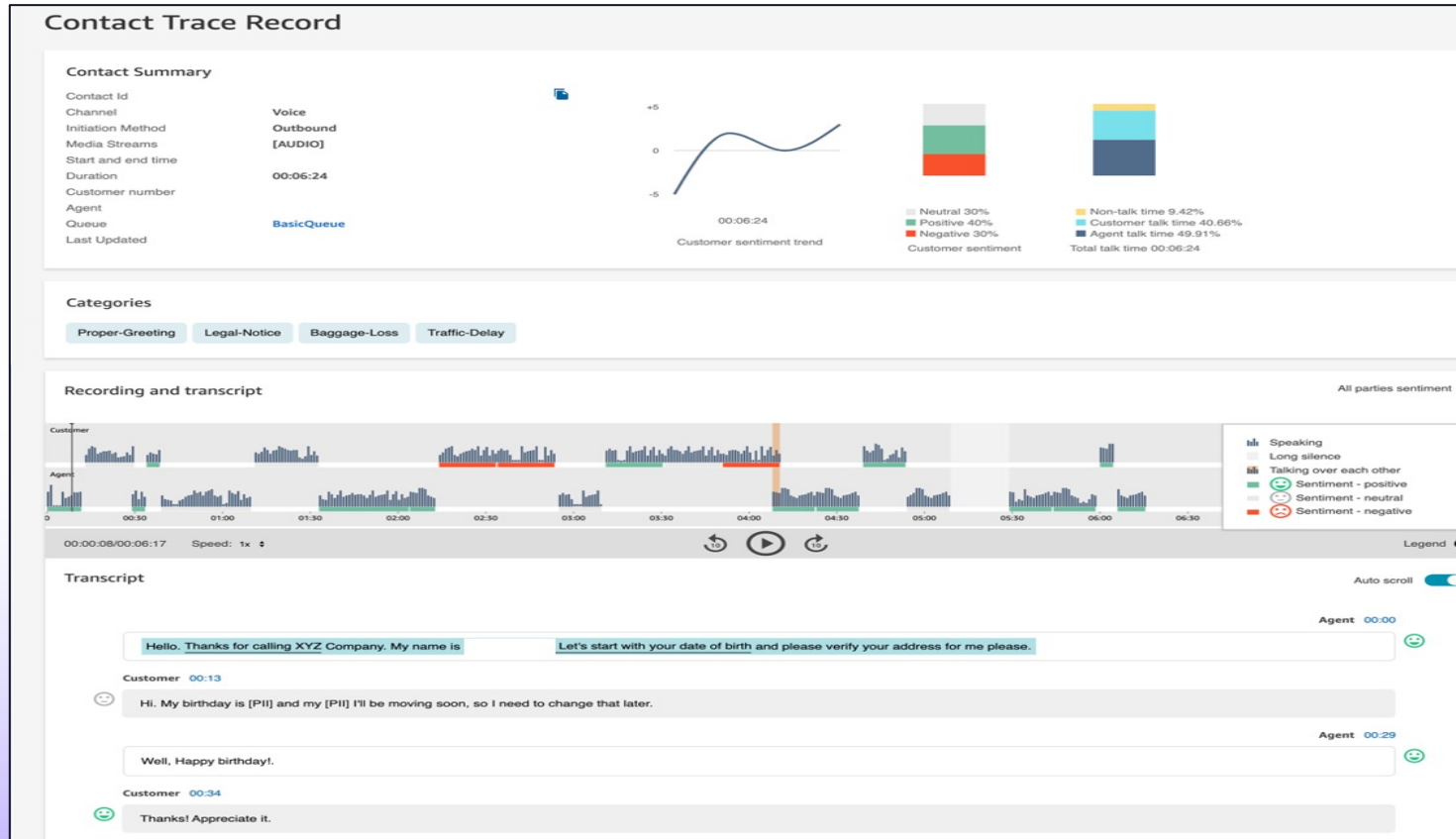
Below the message is a 'Filters' section with a 'Clear all' link. It includes a 'Time range' dropdown, a 'Channel' dropdown set to 'All Channels', and an 'Add Filter' button. A dropdown menu is open, listing various filter options: Agent, Contact ID, Contact category (CL), Customer phone number, Disconnect reason, Initiation method, Interaction duration, Non-talk time (CL), Queue, Sentiment Score (CL), System phone number, and Words or phrases (CL).

The main area shows a table of contacts with columns: Contact ID, Channel, Initiation Timestamp, Queue, Agent, Recording/Transcript, Customer Phone Number, Disconnect Timestamp, and Contact Duration. The table is currently empty, displaying the message: 'No results found. Please review your filter selection.'

At the bottom right, there is a 'Rows per page' dropdown set to 25 and navigation arrows.

- Use the Contact Search page to find calls analyzed by Contact Lens
- Search by filters unique to Contact Lens such as words or phrases, contact category, sentiment score, and non-talk time

Use Case - Review call details



- Get sentiment for every conversation turn and over the length of the entire call
- See matched call categories, the breakdown of talk time between agent and customer, and any interruptions or silence

Use Case - Customize vocabulary to improve accuracy

Name	Language	State
Test-	British English	Ready (default)
TestUpload	Scottish English	Ready

Context menu for the second row:

- Set as default
- Download
- Remove

- Expand and tailor the vocabulary of the speech-to-text engine in Contact Lens.
- Improve the accuracy of speech recognition for product names, brand names, and domain-specific terminology

This is the header. It is required.

```
sample-table-type-file (2) - Notepad
File Edit Format View Help
Phrase IPA SoundsLike DisplayAs
Los-Angeles Los Angeles
F.B.I. ε f b i aɪ FBI
Etienne eh-tee-en
```

Use Case - Get call summarization automatically

The screenshot displays a contact record for a voice call. The contact ID is 67ffb54... and the call was completed on July 17, 2024, at 03:00:36 pm. The agent is agent1. The call summary, generated by AI, states: "The customer was frustrated about a delayed gift delivery. The agent checked the order and saw it was delayed due to weather conditions. To resolve it, the agent offered to expedite a replacement shipment at no extra cost, which the customer accepted. The customer emphasized the delivery was very important and timely." The transcript shows the customer saying "Hi." and a key highlight of "Issue" is present.

Contact ID	Channel	Contact status	Initiation timestamp	System phone number	Queue	Agent	Recording/Transcript	Cust
67ffb54...	Voice	Completed	Jul 17, 2024, 03:00:36 pm	outbound	BasicQueue	agent1	🔊 📄 🗑️	+17

Audio

0:00 / 0:00

Summary Generated by AI

The customer was frustrated about a delayed gift delivery. The agent checked the order and saw it was delayed due to weather conditions. To resolve it, the agent offered to expedite a replacement shipment at no extra cost, which the customer accepted. The customer emphasized the delivery was very important and timely.

Transcript Show key highlights

Key highlights: Issue

Categories: Greeting

Customer 00:03

Hi.

- Identifies and labels key parts of the conversation
- Finds issue, outcome, and action item of a call
- Output available in Contact Lens JSON file

Pay-as-you-go Pricing

Pay only for what you use. No long-term commitments or minimum monthly fees

AWS Free Usage Tier

\$Free

Get started

Receive:
90 minutes per month

Contact Lens Pricing by AWS Region*

\$0.015/min

First 5 million minutes

\$0.0125/min

5 million+ minutes

AWS Regions:

US East (N. Virginia), US West (Oregon), Canada (Central), Europe (London), Europe (Frankfurt), Asia Pacific (Singapore), Asia Pacific (Sydney), Asia Pacific (Seoul), and Asia Pacific (Tokyo)

*Prices here are in USD and apply to instances hosted in US-based regions.

For other pricing, including outbound dialing rates, go to: <https://aws.amazon.com/connect/pricing/>

Amazon Q in Connect

Challenges in solving customer concerns



Identify customer concern



Ask qualifying questions



Search for solution across disparate sources



Knowledge management system
Customer-facing FAQ sites
Internal chats with colleagues



Take additional steps to resolve concern



End call without resolution
Transfer or escalate

Amazon Q - A generative AI powered assistant from AWS

AMAZON Q **DEVELOPER**



AMAZON Q **BUSINESS**

Embedded

Amazon Q
In Connect

Amazon Q
In QuickSight

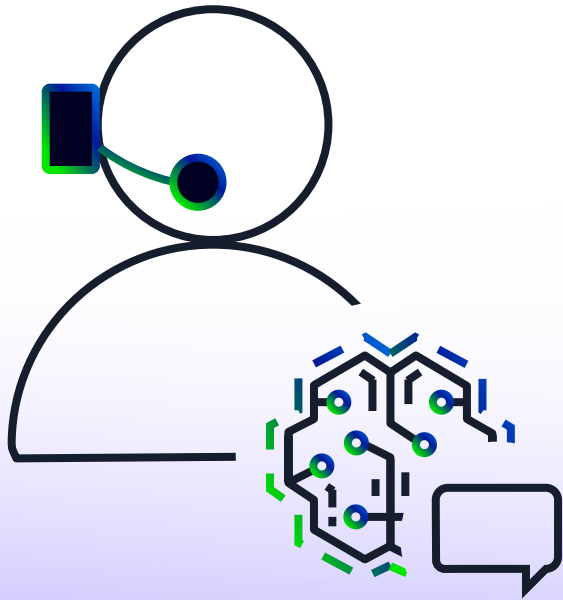
Amazon Q in
AWS Supply Chain

Benefits

In-built privacy and security

Customizable to your business

Amazon Q in Connect uses generative AI to assist agents with recommended responses and actions



- Generate real-time responses that agents can deliver directly to customers, along with actions to take, based on context from the live conversation and relevant information from your company content (e.g., knowledge articles, FAQs, documents)
- Agents can also search across company content to receive specific recommendations, like actions to take
- Source knowledge articles and documents are displayed so agents can access more detail if needed

Generative AI-powered agent assist delivers suggested responses and actions

The screenshot displays the Amazon Q agent assist interface. On the left, a chat window shows a conversation with 'Nikki Wolf'. The chat history includes a message from Nikki Wolf: "Hi, I wanted to find out more about the travel rewards credit card." and a response from John: "I'd be happy to help with that. Our travel rewards card offers 3 points per dollar on all travel expenses. It offers reimbursement of trusted traveler programs, and carries a \$100 annual fee." The main panel shows suggested actions for Nikki Wolf, such as "New case - transaction declined", "Make payment", "Unlock Card", "Apply for a new credit card", and "Add travel notice".

Detected issue

Generated response

Generated solution

Articles and documents used to generate the response & solution

How Amazon Q in Connect works

What is the customer's issue?



What information is relevant?



What Amazon Q asks Bedrock



Generative Response

LLM: "I apologize, but your reservation will be subject.. "

Generative Solution

LLM: "Here are the steps to resolve the customer's issue..."

CUSTOMER: "I'm supposed to pickup my rental car in 2 hours but I need to cancel. Will I be charged a cancellation fee?"

This document from the customer's knowledge repository is relevant: 'Cancellation Policy.docx'

Amazon Q in Connect: "Provide a response as an agent using information from 'cancellation policy.docx'"

Intent Detection ML Model

Semantic Matching ML Model

Prompt Engineering

Amazon Bedrock LLM

Generative AI-powered post-contact summaries

Agents can access post-contact summaries for voice contacts on the Contact Control Panel (CCP)

Managers and supervisors can access summaries for voice and chat contacts on the Amazon Connect admin website

Contact details
In progress | Last updated: Jul 17, 2024, 03:02:06 pm

Overview
Voice | Duration: 1 min 23 s (Jul 17, 2024, 3:00:36 PM – 3:01:59 PM)

Channel subtype	Agent	Initiation method	Disconnect reason
Telephony	agent1 (Doe, Jane)	Outbound	Customer disconnect

Customer phone number: +1 [redacted] | Customer sentiment: [Progress bar]

Summary ✨ Generated by AI

The customer was frustrated about a delayed gift delivery. The agent checked the order and saw it was delayed due to weather conditions. To resolve it, the agent offered to expedite a replacement shipment at no extra cost, which the customer accepted. The customer emphasized the delivery was very important and timely.

1

Amazon Connect Contact Control Panel | Softphone

Available

Transcript

Issue

Summary

Generating summary

Customer 00:03: Hi.

Agent 00:05: Greeting: Hello, this is Jane from Amazon. How can I help you today?

Customer 00:11: Issue: Um, I'm actually very frustrated now, uh, because my gift delivery has been delayed for a few days.

Agent 00:20: Greeting: Oh, sorry about that. Could you provide your order number please so I can check it for you.

Customer 00:27: Greeting: Hello, this is Jane from Amazon. How can I help you today?

Close contact

2

Amazon Connect Contact Control Panel | Softphone

Available

Transcript

Issue

Summary available ✨

Customer 00:03: Hi.

Agent 00:05: Greeting: Hello, this is Jane from Amazon. How can I help you today?

Customer 00:11: Issue: Um, I'm actually very frustrated now, uh, because my gift delivery has been delayed for a few days.

Agent 00:20: Greeting: Oh, sorry about that. Could you provide your order number please so I can check it for you.

Customer 00:27: Greeting: Hello, this is Jane from Amazon. How can I help you today?

Close contact

3

Amazon Connect Contact Control Panel | Softphone

Available

Transcript

Issue

Summary

The customer was frustrated about a delayed gift delivery. The agent checked the order and saw it was delayed due to weather conditions. To resolve it, the agent offered to expedite a replacement shipment at no extra cost, which the customer accepted. The customer emphasized the delivery was very important and timely.

Customer 00:03: Hi.

Agent 00:05: Greeting: Hello, this is Jane from Amazon. How can I help you today?

Customer 00:11: Issue: Um, I'm actually very frustrated now, uh, because my gift delivery has been delayed for a few days.

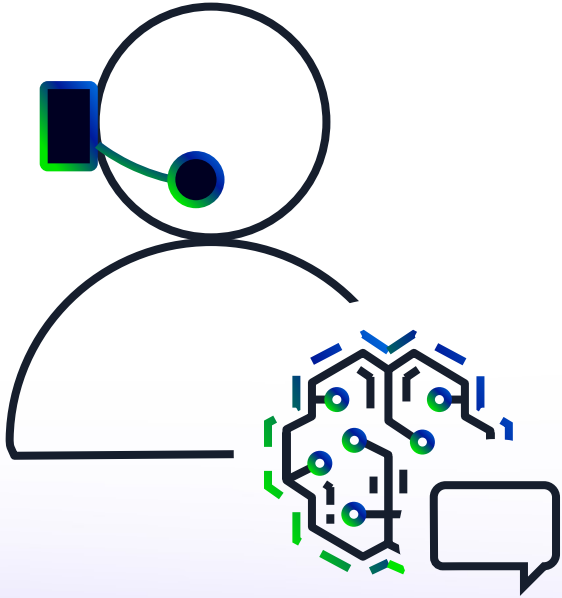
Agent 00:20: Greeting: Oh, sorry about that. Could you provide your order number please so I can check it for you.

Customer 00:27: Greeting: Hello, this is Jane from Amazon. How can I help you today?

Close contact

Developers can directly ingest the summaries from the APIs into third-party systems

Amazon Q in Connect's Business Value



Onboarding time



Average handle time (AHT)



Escalations

Amazon Q in Connect will increase overall agent productivity by 10%, decrease costly escalations by 5%, and new agents will become proficient 10 days sooner, which results \$317 per agent per month savings.

Pay-as-you-go Pricing

No required up-front payments, long-term commitments, fees or data storage charges

Amazon Q in Connect Pricing

\$40/agent/month

You are billed \$40 per agent/per month for agents who either receive a suggested response, or who search across connected knowledge sources. Amazon Connect security profiles enable you to manage which agents can receive suggestions and search Amazon Q in Connect.

*Prices here are in USD

Leverage your existing content

Add integration [Info](#)

Choose a data source for this integration and establish a connection to import your content to Amazon Q.

▼ **Integration setup**

Choose integration method

Create a new integration
Create a new integration and select object fields

Use an existing integration
Reuse an existing integration with object fields

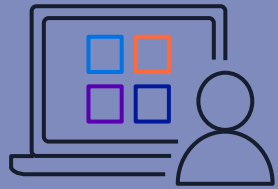
Source

Search

Salesforce
ServiceNow
Zendesk
Microsoft SharePoint Online
S3

- No-code connectors can integrate content from Salesforce, ServiceNow, Zendesk, Microsoft SharePoint Online, & Amazon S3
- Create, Read, Edit, Delete APIs to import and manage content from other knowledge sources
- Support for HTML, Word, PDF & TXT formats

AWS contact center resources



**Immersion days/
workshops**



**Architecture
reviews/guidance**



**Professional
services**



**Partner
engagement**



**Training &
certification**

Get started with Amazon Connect today:
aws.amazon.com/connect/

Next steps

HOW TO GET STARTED WITH AMAZON CONNECT



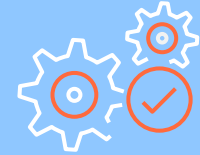
**Define use case
and timeline**



**Proof of concept
to validate**



**Pilot for use case
or subset of traffic**



Production

[Amazon Connect](https://aws.amazon.com/connect/)
aws.amazon.com/connect/

Want to learn more about Generative AI?

AWS Skill Builder

Learn from AWS experts and build in-demand cloud skills
your way

Advance your professional goals with access to 600+ free trainings, prepare for your certification exam, and gain hands-on skills with lab experiences, generative AI-powered simulations, and instructor-driven digital courses.

\$0 Generative AI Learning Plan for Developers



Download now!



Want to learn about AWS best practices?



Generative AI Lens – AWS Well-Architected Framework

Want to learn about AWS best practices?



The AWS Well-Architected Framework





Thank you!

Maria Fassinger (she/her)

Solutions Architect

AWS

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**Please complete the survey
for this session**



**Artificial Intelligence (AI) &
Machine Learning (ML)**

Session: Increase productivity and
satisfaction
with an intelligent contact center