AWS State, Local, and Education Learning Days

North Carolina





Amazon Connect

Accelerate customer experience (CX) innovation with Amazon's native cloud 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 O

MORE THAN 10 MILLION CONTACT CENTER INTERACTIONS A DAY USED BY +100,000 AMAZON CUSTOMER SERVICE ASSOCIATES

Amazon Connect differentiators





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



Amazon Connect has tens of thousands of customers supporting more than 10 million contact center interactions a day



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THE FORRESTER WAVE™ Contact Center As A Service Q1 2023 Strong Challengers Contenders Performers Leaders Stronger current offering • NICE Talkdesk Genesys Five9 Amazon Web Content Guru • Services Vonage LiveVox 💿 💧 \odot Weaker current offering Weaker strategy Stronger strategy Market presence $\cdot \circ \circ \circ \circ \circ$ Source: Forrester Research, Inc. Unauthorized reproduction, citation, or distribution prohibited

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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
Rapid iteration	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.

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AMAZON CONNECT CHATBOTS, PERSONALIZATION, AUTOMATION, AND SMS



PERSONAL

Amazon Connect Flows adapt on a per customer basis

DYNAMIC

nswer customer questions efore 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





Supervisor experience

CONVERSATIONAL ANALYTICS, AGENT EVALUATIONS, FORECASTING, AND SCHEDULING





Administrator experience



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





One application. One seamless experience.

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Pay-as-you-go makes innovation work for you FREEDOM TO RAPIDLY EXPERIMENT AND SCALE UP AND DOWN



No required upfront commitments



Expand globally at your pace



Elastic scalability



Instant experimentation



Reduced maintenance



Accelerated innovation

Contact Lens

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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



analysis

Use Case - Identify critical issues in real-time

eal-time metr	ICS										пφ	Actions
Agents 🖉										Time range: trailing pr	evious 2 hours	<u>*</u> ^ ;
Agent login	Channels	,	Agents					Contacts	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	Connected	00:05:18	Queue name
	Escalation, Angry	customer						0	0		-	-
loginname_b	Voice (2)	*	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	Connected		
	Chat							0	0	3	<u></u>	22.5
loginname_d	Chat total	(On contact	00:24:01	US/ West/ Dept A	RP name A	2	2	0	-	-	-
	Chat	Ŧ						1	0	Connected	00:01:01	Queue name
	Chat	Ŧ						1	0	Connected	00:12:45	Queue nam
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	Ð						1	0	Connected	00:11:56	Queue name
	Chat	Ð						1	0	Connected	00:05:22	Queue nam
loginname_f	All channels		On contact	01:07:52	US/ West/ Dept A	RP name a	3	1	0	-		-
	Voice 1	Ð						1	0	Connected	00:03:12	Queue name
	Chat total							0	0			-

- Get alerted to realtime 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

Contact Id Channel	Voice	
Customer set	ntiment	
Categorie	5	
Proper-Gre	eting	
Transcript		c
	Agent 00:00	0
	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.	٢
	Customer 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 - Monitor frequency of issues over time

Name
Agent_Empathy
Agent_cnipauiy Name can contain characters A-Z, 0-9, or ".", ".", "". It cannot contain spaces.
When Post-call analysis is available 🔻
If all these conditions are met:
Words and phrases - Semantic Match Limit: 100 strings total for the rule
Logic: Any of the following words or phrases were mentioned v during the entire v length of the contact, where speaker is agent v
Enter keywords or phrases. Comma separate multiples entries. Add
Keyword and phrases
I am sorry to hear that
I am sorry that you have to experience this
I apologize for your inconvenience
Add condition

- Look for keywords or phrases related to known customer issues
- Categorize calls based on conversation characteristics such as sentiment, non-talk time, and interruptions

Use Case - Manage policy and regulatory compliance

When					
A Contact Lens post-call analysis is available					
If all v of these conditions are met					
Words or phrases - Exact match Limit: 100 words or phrases total for the rule					i
enne too words of prinses total for the full					
Logic: Any of the following words or phrases	were not mentioned	during the	▼ 30 0	seconds 🔹	of the contact, where speaker is
agent 💌					
Enter keywords or phrases. Comma separate mult	inles entries.			Add	
Keywords or phrases					
thank you for being a gold member					Î
thank you for being a valued customer					Î

- 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



- 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



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

Use Case - Get call summarization automatically

Con	itacts								July 17, 2024 - Amer	ica/Vancouver	Ŧ	\$
	Contact ID	Channel	-	Contact status	Initiation timestamp	•	System phone number	Queue	Agent	Recording/T	ranscript	Cust
~	67ffb54	Voice		Completed	Jul 17, 2024, 03:00:36 pm		outbound	BasicQueue	agent1	⊙ ± ī		+17
Su Th re	placement shi	as frustrated	about a		y. The agent checked the orde ler accepted. The customer en				ly.		expedite a	
Tra	anscript Key hi	ghlights	<u>Issue</u>						Sho	w key highlights		
	Categ	ories	Greeti	ng								
	Custom	er 00:03										
	<u>ні.</u>											

- 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



Get started

Receive: 90 minutes per month **Contact Lens Pricing by AWS Region***

50.015/min \$0.0125/min

First 5 million minutes

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: <u>https://aws.amazon.com/connect/pricing/</u>

Amazon Q in Connect

Challenges in solving customer concerns

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Identify customer concern

Search for solution across disparate sources

Take additional steps to resolve concern

Ask qualifying questions

Knowledge management system Customer-facing FAQ sites

Internal chats with colleagues

End call without resolution Transfer or escalate

Amazon Q - A generative AI powered assistant from AWS



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



How Amazon Q in Connect works

What is the customer's issue?

What information is relevant?

What Amazon Q asks Bedrock

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

Intent Detection ML Model 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'"

Semantic Matching ML Model

Prompt Engineering Generative Response

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

Generative Solution

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

Amazon Bedrock LLM

Generative Al-powered post-contact summaries

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

1 2 3 Managers and supervisors can access summaries for voice and 👂 😑 Amazon Connect Contact Control Panel | Softphone 🔴 😑 🔵 Amazon Connect Contact Control Panel | Softphone 🔴 😑 🔵 Amazon Connect Contact Control Panel | Softphone chat contacts on the Amazon Connect admin website ○ 吕 ≕ ₽ ○ 吕 ≕ ⊉ ○ 읍 ≕ ⊉ my.conn ···· my.conn ···· mv.conn ···· = Available Available 1. 🗖 自 🌣 🐼 Available . | 自 🌣 に 🗆 自 🌣 Contact details 06:32 Transcript 💬 In progress Last updated: Jul 17, 2024, 03:02:06 pm Transcript Transcript Issue Issue Issue Summary available × Customer 00:03 Summary Overview Summary Hi. **(*** The customer was frustrated about a delayed gift Generating summary delivery. The agent checked the order and saw it was Agent 00:05 **Voice** Duration: 1 min 23 s (Jul 17, 2024, 3:00:36 PM – 3:01:59 PM) delayed due to weather conditions. To resolve it, the Customer 00:03 Greeting agent offered to expedite a replacement shipment at no Hi extra cost, which the customer accepted. The customer Hello, this is Jane from Amazon. How can I help you today? Channel subtype Agent Initiation method Disconnect reason emphasized the delivery was very important and timely. П Agent 00:05 Telephony agent1 (Doe, Jane) Outbound Customer disconnect Customer 00:11 Greeting Issue Customer 00:03 Hello, this is Jane from Amazon. How can I help you today? Um, I'm actually very frustrated now, uh, because my gift delivery Customer phone number Customer sentiment Hi. has been delayed for a few days. +1 Customer 00:11 Agent 00:05 Agent 00:20 Issue Greeting Oh, sorry about that. Could you provide your order number Um, I'm actually very frustrated now, uh, because my gift delivery please so I can check it for you Hello, this is Jane from Amazon. How can I help you today? Summary Cenerated by AI has been delayed for a few days. Customer 00:27 Customer 00:11 Agent 00:20 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 ē 8 Ø : Close contact 1 : Close contact the customer accepted. The customer emphasized the delivery was very important and timely. Close contact

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

Amazon Q in Connect's Business Value





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.

What our customers are saying







"Amazon Q in Connect will create **10-15% time savings** on every contact..." "We envision these features will enable our agents and supervisors to focus on delivering premiere customer experiences..." "We expect that Amazon Q in Connect will ensure both our new and experienced agents are prompted in real-time with accurate information..."

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

Integration setup	
hoose 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
burce	
	A
۹	
Salesforce	
ServiceNow	
Zendesk	
Microsoft SharePoint Online	

- 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

FAQs

Why should a customer be confident in Amazon Connect's approach to generative AI?

AI and ML have been a focus for Amazon for over 20 years and **what we do best is apply AI to real world applications** at scale. From Alexa to Amazon Go "no checkout line" stores, we have been using AI to find practical solutions to a variety of business problems.

What LLMs does Amazon Q in Connect use?

Amazon Q in Connect is built using Amazon Bedrock to deliver the highest business value while optimizing costs for our customers. While **we don't release the details on which LLMs the product uses**, we are constantly evaluating the performance of foundational models and willing/able to make changes to improve customer and business outcomes.

What guardrails do we have in place to ensure LLM responses are accurate?

We use Amazon Bedrock, providing all of the AWS scalability, reliability, and security that customers are accustomed to and expect. Additionally, to address concerns about AI hallucinations we are

- 1) keeping agents in control to edit/ modify AI generated responses before delivery to end customers
- 2) providing 'references' along with AI generated response (e.g. links to articles)
- **3)** collecting user feedback for the generative responses implicitly (e.g., number of human edits) and explicitly (thumbs up / thumbs down button for agents) for improvements.

FAQs

What channels does Amazon Connect in Q work with?

Amazon Q provides real-time recommendations when contact lens is enabled in the **voice and video calling** channels. Contact Lens is not required for Amazon Q to provide real-time recommendations in the **chat and SMS channels**. Agents can also query Amazon Q both during active contacts and between contacts.

What regions is Amazon Q in Connect available? What languages are available?

The service is available in **US East (N. Virginia), US West (Oregon)**, Europe (London), Europe (Frankfurt), Asia Pacific (Sydney), and Asia Pacific (Tokyo). The service is only available in English. *Note: Amazon Connect instances in Europe (London) leverage Amazon Bedrock in Europe (Frankfurt). Connect instances in Asia Pacific (Sydney) leverage Amazon Bedrock in Asia Pacific (Tokyo). All other Amazon Connect instances leverage Amazon Bedrock in their respective regions.*

How can I get started?

In the in the AWS console, navigate to 'Amazon Connect' and the 'Amazon Q in Connect' section where you are prompted to create a new Domain (Assistant) and connect a knowledge source (e.g. Salesforce, ServiceNow, Zendesk, Microsoft Sharepoint Online, and Amazon S3) using no-code connectors.

AWS contact center resources



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



HOW TO GET STARTED WITH AMAZON CONNECT





Amazon Connect aws.amazon.com/connect/

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Thank you!

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Artificial intelligence (AI) and

machine learning (ML)

Increase productivity and satisfaction with an intelligent contact center

