
AWS
re:Invent

EMB029

ML-powered voice authentication with Amazon Connect Voice ID

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Agenda

Introduction to Amazon Connect

2020 Amazon Connect launches

Challenges with verifying a caller's identity

How Amazon Connect Voice ID helps address these problems

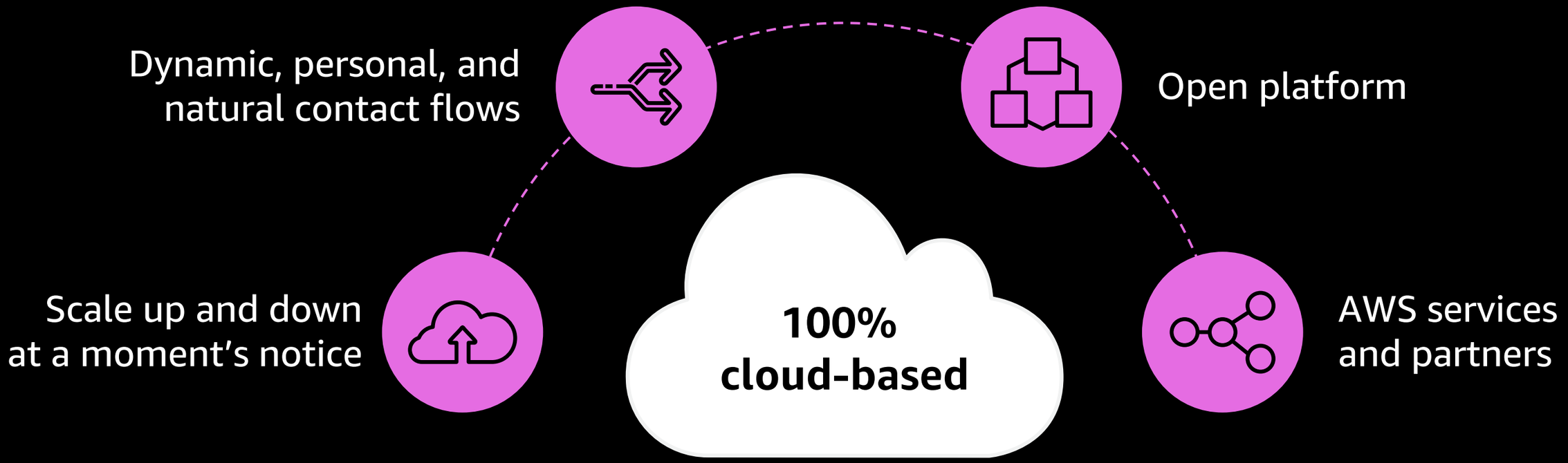
Resources and how to get started



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Amazon Connect

EASY-TO-USE, OMNICHANNEL CLOUD-BASED CONTACT CENTER



Pay-as-you-go pricing

Amazon Connect has been innovating quickly

147+ major feature launches in three years

Automatic agent status change	Per-second billing	Real-time customer voice stream	Contact flow import / export	Salesforce CTI adaptor	ISO compliance	Contact Lens	Multi-block editing	User management API	Natural text-to-speech voices
Asia Pacific (Tokyo) Region	Real-time analytics dashboard	Contact flow block copy / paste	Conversation logs	Chatbots	Amazon Lex languages: Spanish, French, and German	ML-based PII redaction	AWS CloudTrail support for Amazon Connect APIs	Agent event streams	Contact attributes API
User hierarchy API	SOC compliance	AWS CloudTrail integration	Output file storage	Conversational speaking style voices	Chat for web and mobile	Whisper flows	Europe (London) Region	Agent connection time metrics	Speech synthesis markup language support
Tagging support	Telephony metadata	Resource config APIs	Contact flow looping	Metrics and reporting	Auto queues call transfer	US West (Oregon) Region	Contact flow versioning	Customer voice stream	Automated queue callbacks
SSO SAML 2.0	Pause / resume call recordings	Interactive chat messages	Dynamic range compression (DRC) tag	NA/EU/APAC telephony pricing decreases	Contact flow AWS Lambda functions	PCI-DSS compliance	Queue metrics API	HIPAA	One-click drill-downs for real-time metrics

Challenges with caller authentication



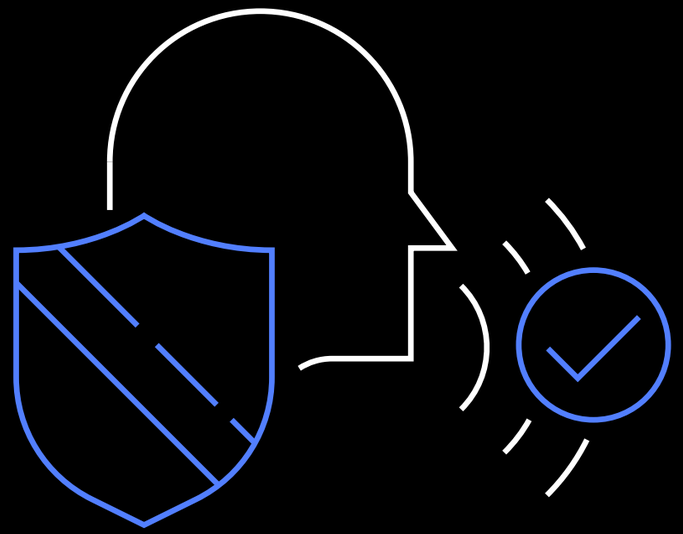
- Long and frustrating authentication process
- Relies heavily on the knowledge possessed by the caller
- Stolen personal data increases risk of impersonation
- Higher vulnerability in Interactive Voice Response (IVR) conversations limits self-service options for customers

These challenges result in increased customer friction and higher customer service costs

INTRODUCING

Amazon Connect Voice ID

Real-time caller authentication using ML-powered voice analysis



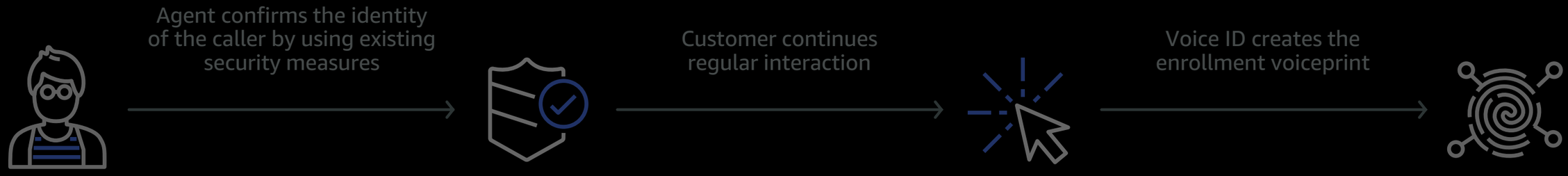
- Passive enrollment and verification – no need to say or repeat any specific words or phrases
- Increased security for self-service IVR interactions
- Agent experience for verifying stated caller identity

Please know, preview user experience and launch features are subject to change

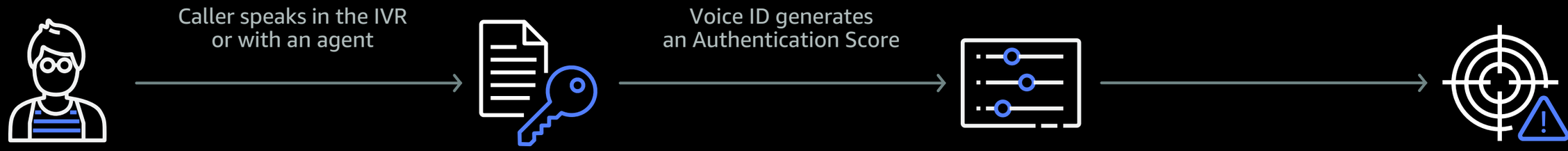
INTRODUCING: AMAZON CONNECT VOICE ID

Passive enrollment and verification

Enrollment Process

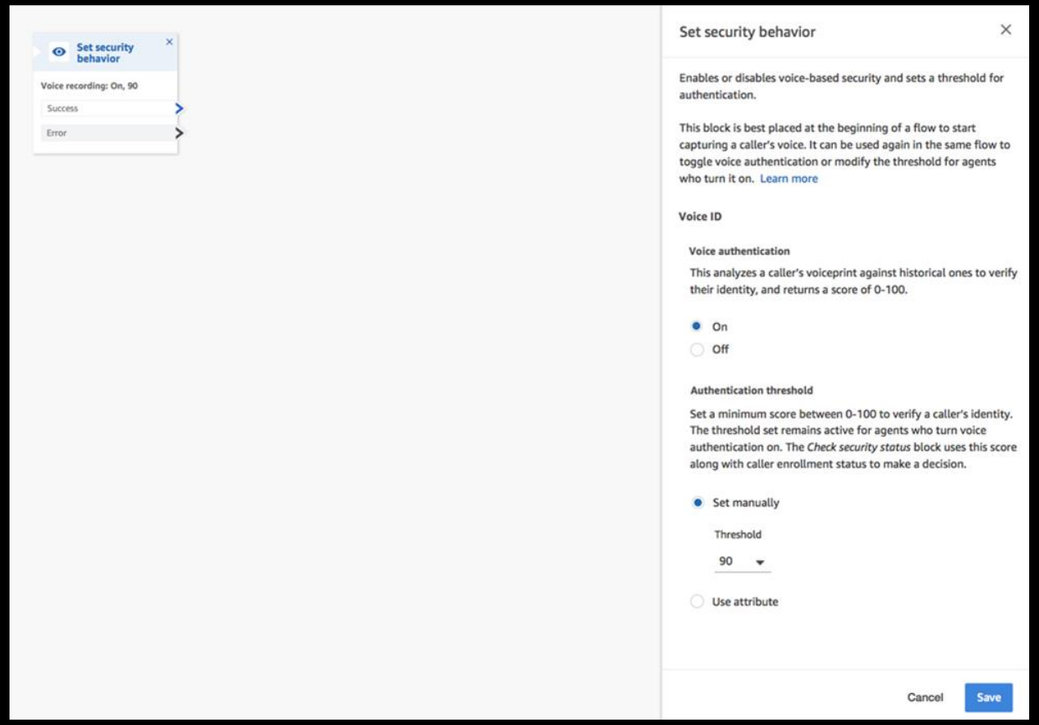


Verification Process



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Increased security for self-service IVR interactions



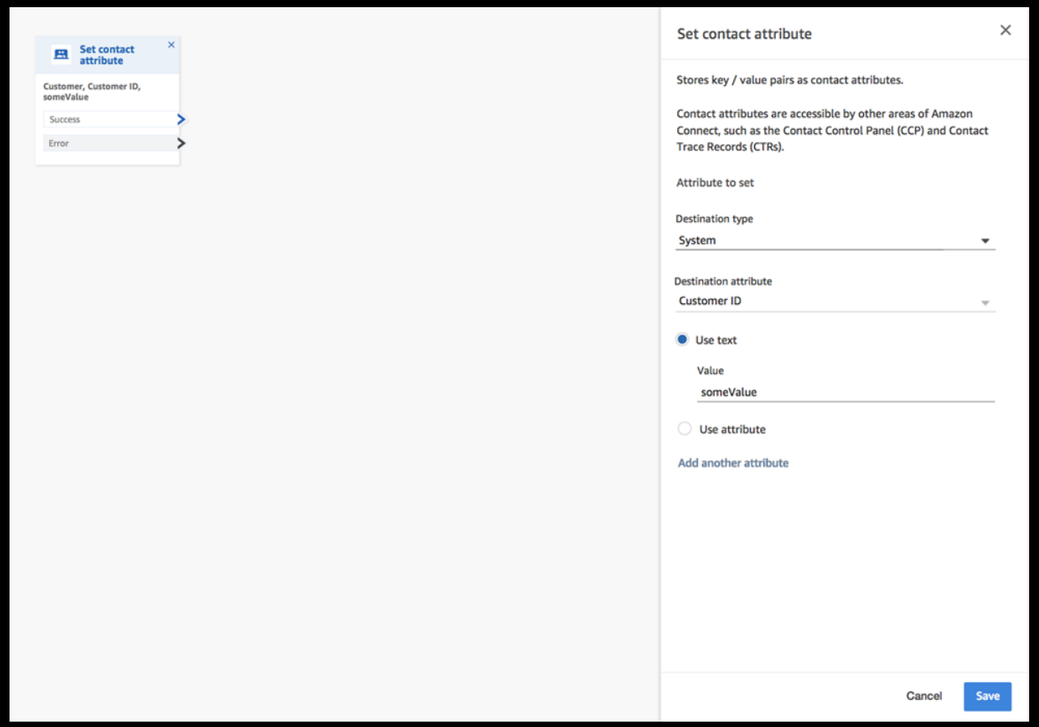
Use the "Set security behavior" contact flow block at the start of a call

When you set "voice authentication" to "On," Amazon Connect starts streaming the customer portion of the audio to Voice ID

In this block, you can increase or decrease the default Authentication Score threshold of 90 based on your security and business requirements

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Increased security for self-service IVR interactions



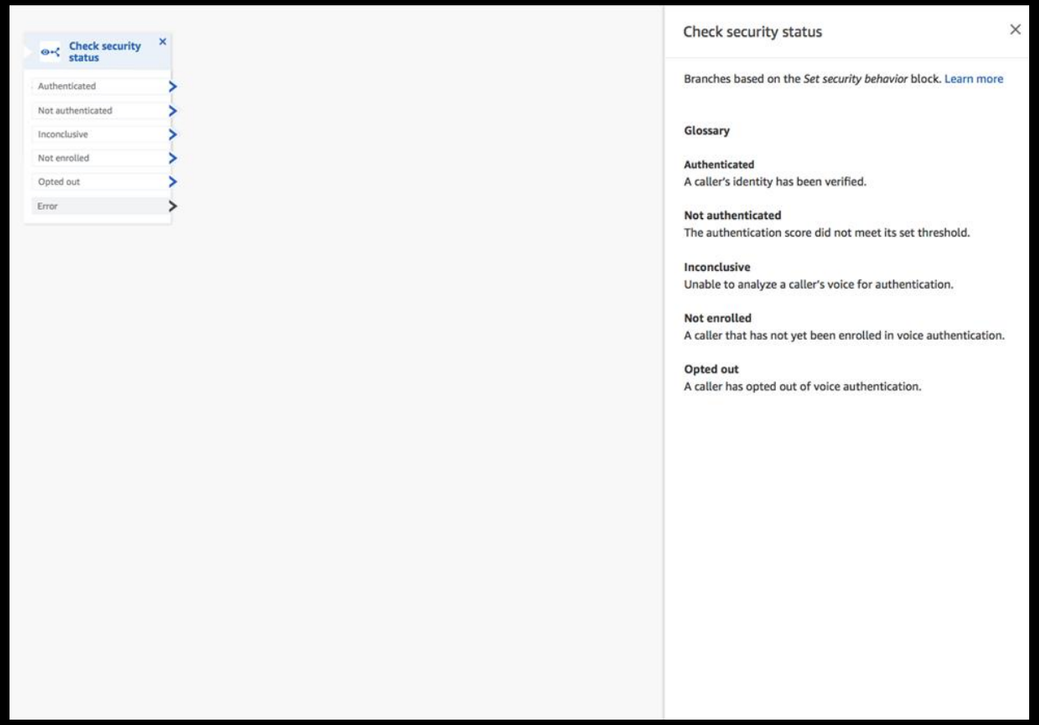
The next step is to look up the unique customer ID of the caller from your CRM system

Use the “contact attribute” block to assign a value to the customer ID attribute

Voice ID uses this customer ID value to enroll a customer or verify the caller’s claimed identity

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Increased security for self-service IVR interactions



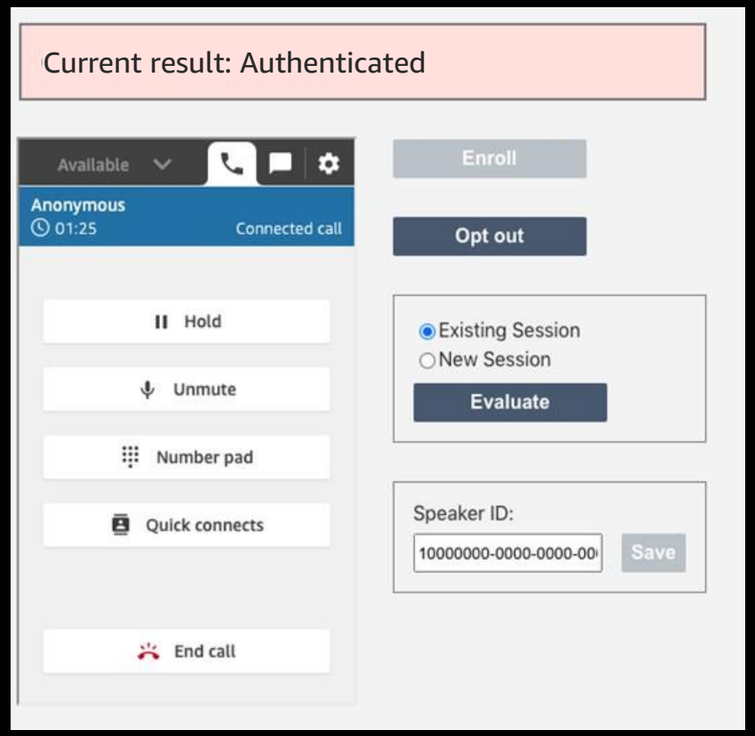
You can then use the “Check security status” block to check the response from Voice ID

Voice ID returns one of the following status messages—“Authenticated,” “Not Authenticated,” “Inconclusive,” “Not enrolled,” or “Opted-out”

If the Authentication Score is greater than or equal to the threshold (default is 90), then Voice ID returns the status “Authenticated”

INTRODUCING: AMAZON CONNECT VOICE ID

Agent experience for verifying stated caller identity



The Amazon Connect Streams API gives you the power to integrate Voice ID in your existing web applications with Amazon Connect

The Streams API allows you to create an interface that makes it easy for the agent to enroll the customer with the click of a button

You can also use the Streams API to create an experience that allows agents to view authentication results in the IVR, opt-out a customer, and re-authenticate the caller again

Demo



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Watch Amazon Connect launch sessions

SESSION ID: EMB022

Amazon Connect and the future of cloud contact centers

Pasquale DeMaio, GM Amazon Connect – AWS
Yasser El-Haggen, World Wide Solutions Architect – AWS



SESSION ID: EMB041

Real-time ML analytics with Contact Lens for Amazon Connect

Kaustubh Khanke, Senior Product Manager, Artificial Intelligence – AWS
Sagar Khasnis, Senior Solutions Architect, Productivity Applications – AWS



SESSION ID: EMB029

ML-powered voice authentication with Amazon Connect Voice ID

Atul Deo, Principal Product Manager, Artificial Intelligence – AWS



SESSION ID: EMB049

Solve customer issues quickly with Amazon Connect Wisdom

Guru Raj, GM, Amazon Connect Wisdom – AWS
Lizzy Mitchell, Head of Customer Experience Analytics – Traeger Grills



SESSION ID: EMB038

Personalized service with Amazon Connect Customer Profiles

Davor Golac, Senior Manager – AWS
Shobhit Gupta, Senior Product Manager – AWS



SESSION ID: EMB054

Prioritize, assign, track, and automate agent work: Amazon Connect Tasks

Prashant Trehan, Product Manager – AWS
Erin Hall, Senior Solutions Engineer – AWS



Watch Amazon Connect re:Invent sessions

SESSION ID: BIZ205

Origin Energy delivers great agent and customer experiences

Annie Weinberger, Sr. Product Marketing Manager – AWS
Rod Van Onselen, Chief Transformation and Digital Officer – Origin Energy
Liam McWhirter, Head of Customer Journey Transformation – Origin Energy

SESSION ID: BIZ302

Pushing contact center boundaries with Salesforce and AWS

Marc Rudkowski, Principal Product Manager – AWS
Zane Gamble, Product Manager – Salesforce

SESSION ID: BIZ203

Responsive customer service with Amazon Connect

Kentis Gopalla, Partner Practice Lead – AWS
Roy Bacharach, Principal Director – Accenture

SESSION ID: BIZ305

How Best Western built a modular and dynamic contact center

Ayesha Borker, Solutions Architect – AWS
Troy Tracy, Sr. Manager, Technology Management – Best Western

SESSION ID: WPS213

Rapidly deploying social services on Amazon Connect

Dominic Catalano, Sr. Specialist Solutions Architect – AWS
Jessica Seale, Digital Director – U.S. Small Business Administration

SESSION ID: FSI205-PT1

Barclays: Transforming customer experience with Amazon Connect

Milos Cosic, Sr. WW Prod Apps Specialist SA – AWS
Sean Charlton, CIO of Contact Centres – Barclays

Get started today



Set up today:
https://aws.amazon.com/connect/



Learn about new capabilities:
https://aws.amazon.com/blogs/contact-center/



Find more information:
https://aws.amazon.com/connect/resources/

Thank you!



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