ChoiceView from Radish Systems on the AWS Cloud

Quick Start Connect Integration

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AWS Quick Start team

Visit our [GitHub repository](#) for source files and to post feedback, report bugs, or submit feature ideas for this Quick Start.

Contents

This Connect integration Quick Start was created by Radish Systems in collaboration with Amazon Web Services (AWS). ChoiceView, developed by Radish, allows a transient data connection to be established in conjunction with a standard phone call.

[Quick Starts](#) are automated deployments that use AWS CloudFormation templates to deploy key technologies on AWS, following AWS best practices.

Overview

This deployment guide provides step-by-step instructions for deploying the ChoiceView integration to Amazon Connect on the AWS Cloud.

ChoiceView on AWS

With ChoiceView, the Amazon Connect service becomes a multimedia platform that allows callers with a smartphone—or virtually any phone and browser combination—to interact with visual live agents and visually enhanced virtual agents. Callers don't have to install a mobile app, preregister, or set up a profile in advance.

ChoiceView can transform ordinary phone calls into "voice with visual" calls while maintaining compatibility with existing phones, dialing plans, business phone systems and contact centers. ChoiceView adds a visual dimension to calls with live agents and with virtual agents, such as bots and Interactive Voice Response (IVR) systems. Callers can see, hear, interact with, and save visuals (such as menus, graphics, interactive forms, documents, clipboard copies, screenshots and video snippets) while talking or chatting on their smartphone or other device.

ChoiceView benefits include:

- Visual menus that enable callers to see and tap their choices

- The ability to save visual information quickly and accurately instead of needing to write it down

- Faster, more efficient call resolution, reducing the need for live agents

The ChoiceView integration provides an AWS Lambda function for use in your Amazon Connect contact flows. This function enables you to connect to the caller's ChoiceView client, then send visual materials and receive visual information from the client. ChoiceView is a web app that runs in a browser. It doesn't require installation or use of a mobile app, so it works with first-time callers. For more information, see the [ChoiceView website](#).

The integration uses the [Twilio](#) service to send SMS messages. The SMS message contains the link to the ChoiceView web client. SMS messages sent by Twilio use a phone number that is different from the Amazon Connect phone number. The Twilio credentials and the assigned phone number for SMS messages are provided by Radish.

Cost and licenses

You are responsible for the cost of the AWS services used while running this Quick Start. There is no additional cost for using the Quick Start.

For cost estimates, see the pricing pages for each AWS service you will be using. Prices are subject to change.

The AWS CloudFormation template for this Quick Start includes configuration parameters that you must get from Radish Systems. You will receive the configuration parameters needed for the Amazon Connect integration.

Architecture

Deploying this Quick Start sets up the following Connect integration.
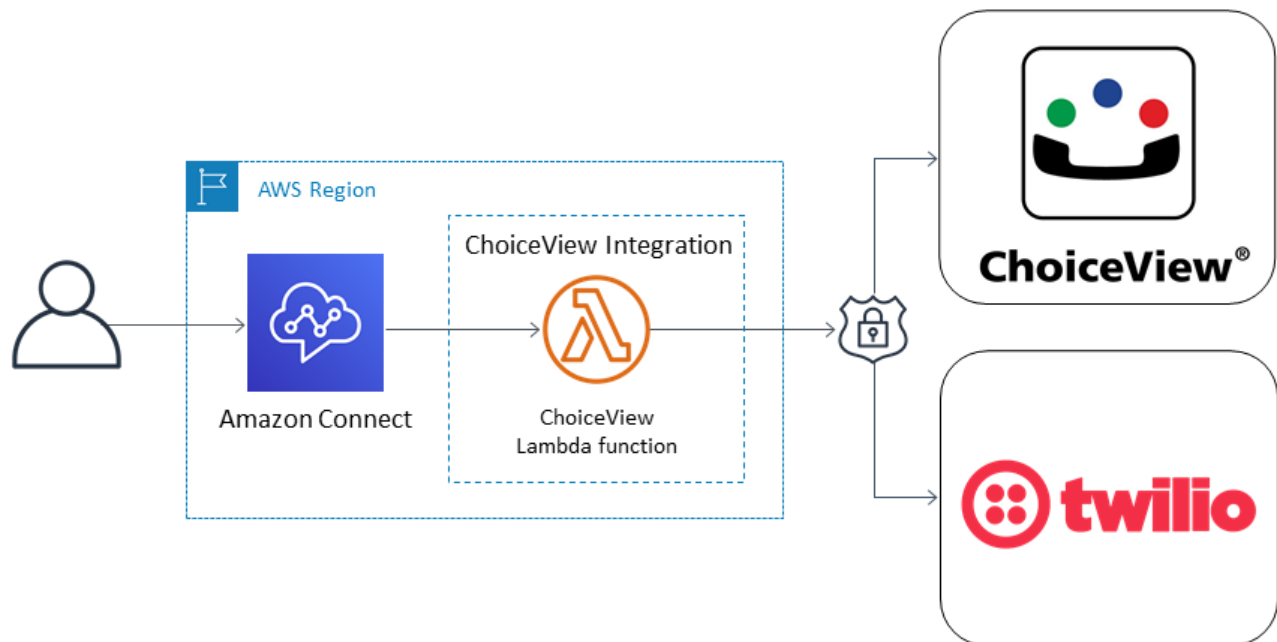
Figure 1: Architecture for Radish Systems' ChoiceView on AWS

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Planning the deployment

Specialized knowledge

This Quick Start assumes familiarity with Amazon Connect, AWS CloudFormation, and AWS Lambda.

If you're new to AWS, visit the Getting Started Resource Center.

AWS account

If you don't already have an AWS account, create one at https://aws.amazon.com by following the on-screen instructions. Part of the sign-up process involves receiving a phone call and entering a PIN using the phone keypad.

Your AWS account is automatically signed up for all AWS services. You are charged only for the services you use.

Technical requirements

An Amazon Connect instance and a Radish Systems' ChoiceView account are required for this deployment.

Deployment steps

Step 1. Prepare an Amazon Connect instance

1. Sign in to your AWS account at https://aws.amazon.com with an AWS Identity and Access Management (IAM) user role that has the necessary permissions.

2. If you don't already have an Amazon Connect instance, see the AWS documentation for information on how to create an Amazon Connect instance.

Step 2. Create a ChoiceView account

This Quick Start requires a ChoiceView account.

1. If you don't already have a ChoiceView account, contact Radish Systems at https://www.radishsystems.com/contact/ and submit the form to request an account.

2. You will receive the information needed to deploy the ChoiceView integration and create contact workflows that work with the ChoiceView client.

Step 3. Launch the Quick Start

> **Notes**   The instructions in this section reflect the older version of the AWS CloudFormation console. If you're using the redesigned console, some of the user interface elements might be different.
>
> You are responsible for the cost of the AWS services used while running this Quick Start reference deployment. There is no additional cost for using this Quick Start. For full details, see the pricing pages for each AWS service you will be using in this Quick Start. Prices are subject to change.

1. Launch the AWS CloudFormation template into your AWS account.

Deploy ● Radish ChoiceView

Deploy Radish ChoiceView into a Connect instance AWS

The deployment takes a couple minutes to complete.

2. Check the AWS Region that's displayed in the upper-right corner of the navigation bar, and change it if necessary. The template is launched in the US East (Virginia) Region by default.

3. On the **Select Template** page, keep the default setting for the template URL, and then choose **Next**.

4. On the **Specify Details** page, change the stack name if needed. Review the parameters for the template. Provide values for the parameters that require input. For all other parameters, review the default settings and customize them as necessary.

> **Note**   Use the parameter values that were provided by Radish when you set up your ChoiceView account. Do not change any other parameters.

When you finish reviewing and customizing the parameters, choose **Next**.

PARAMETERS FOR DEPLOYING CHOICEVIEW INTO AN AMAZON CONNECT INSTANCE

[View template](#)

ChoiceView Integration Configuration:

Parameter label (name)	Default	Description
ChoiceView client id (`ChoiceViewClientId`)	*Requires input*	The ChoiceView client ID. This is used to connect to the ChoiceView API. This is provided by Radish Systems when your account is activated
ChoiceView client secret (`ChoiceViewClientSecret`	*Requires input*	The ChoiceView client secret. This is used to connect to the ChoiceView API. This is provided by Radish Systems when your account is activated
ChoiceView API base url (`ChoiceViewServiceUrl`)	https://cvnet.radishsystems.com/ivr/api/	The base URL of the ChoiceView API. Use the default value unless Radish has explicitly told you to use a different URL.
Twilio Account SID (`TwilioAccountSid`)	*Requires input*	The Twilio account SID. If you don't have a Twilio account, Radish Systems will set one up for you.
Twilio Authentication Token (`TwilioAuthToken`)	*Requires input*	The Twilio token that is used for authentication.
Twilio phone number (`TwilioPhoneNumber`)	*Requires input*	The phone number used to send SMS messages. This number is different from the phone number that is assigned to the Connect instance.

AWS Quick Start Configuration:

> **Note**   We recommend that you keep the default settings for the following two parameters, unless you are customizing the templates for your own deployment projects. Changing the settings of these parameters will automatically update code references to point to a new location.

Parameter label (name)	Default	Description
Quick Start S3 bucket name (QSS3BucketName)	aws-quickstart	The S3 bucket you created for your copy of Quick Start assets, if you decide to customize or extend the Quick Start for your own use. The bucket name can include numbers, lowercase letters, uppercase letters, and hyphens, but should not start or end with a hyphen.
Quick Start S3 key prefix (QSS3KeyPrefix)	connect-integration-radish-choiceview/	The S3 key name prefix used to simulate a folder for your copy of Quick Start assets, if you decide to customize or extend the Quick Start for your own use. This prefix can include numbers, lowercase letters, uppercase letters, hyphens, and forward slashes.

5. On the **Options** page, you can specify tags (key-value pairs) for resources in your stack and set advanced options. When you're done, choose **Next**.

6. On the **Review** page, review and confirm the template settings. Under **Capabilities**, select the two check boxes to acknowledge that the template will create IAM resources and that it might require the capability to auto-expand macros.

7. Choose **Create** to deploy the stack. Monitor the status of the stack. When the status is **CREATE_COMPLETE**, the ChoiceView Connect integration is ready.

Step 4. Create a Contact flow to start a ChoiceView session

1. Download a sample ChoiceView session contact flow from the GitHub repository.

2. In the Amazon Connect console, choose the name of the instance that will use the ChoiceView Connect integration. In the left navigation, choose the Contact flows link.

3. At the top of the Contact Flows page, choose Create contact flow page.

4. At the top right of the page, in the drop-down menu next to the Save button, choose Import flow (beta).

5. In the file dialog box, choose the SampleChoiceViewIntegration.flow file that you downloaded.

aws

6. In the Contact Flow Designer, locate all four of the Invoke AWS Lambda function blocks. For each block, change the selected function to the function that was added by the Quick Start.

7. Save the contact flow.

8. On the Manage Phone numbers page, assign a phone number to the Sample ChoiceView Integration contact flow. You can call the number to ensure that ChoiceView has been installed properly.

For more information on how to integrate ChoiceView into your contact flows, refer to the documentation that you received from Radish when you set up your ChoiceView account.

Troubleshooting

Q. I encountered a CREATE_FAILED error when I launched the Quick Start.

A. If AWS CloudFormation fails to create the stack, we recommend that you relaunch the template with **Rollback on failure** set to **No**. (This setting is under **Advanced** in the AWS CloudFormation console, **Options** page.) With this setting, the stack's state will be retained and the instance will be left running, so you can troubleshoot the issue. (For Windows, look at the log files in `%ProgramFiles%\Amazon\EC2ConfigService` and `C:\cfn\log`.)

> **Important**   When you set **Rollback on failure** to **No**, you will continue to incur AWS charges for this stack. Please make sure to delete the stack when you finish troubleshooting.

For additional information, see [Troubleshooting AWS CloudFormation](#) on the AWS website.

Q. I encountered a size limitation error when I deployed the AWS CloudFormation templates.

A. We recommend that you launch the Quick Start templates from the links in this guide or from another S3 bucket. If you deploy the templates from a local copy on your computer or from a non-S3 location, you might encounter template size limitations when you create the stack. For more information about AWS CloudFormation limits, see the [AWS documentation](#).

Send us feedback

To post feedback, submit feature ideas, or report bugs, use the **Issues** section of the [GitHub repository](#) for this Quick Start. If you'd like to submit code, please review the [Quick Start Contributor's Guide](#).

Additional resources

AWS resources

- [Getting Started Resource Center](#)

- [AWS General Reference](#)

- [AWS Glossary](#)

AWS services

- [AWS CloudFormation](#)

- [Amazon Connect](#)

- [AWS Lambda](#)

- [IAM](#)

ChoiceView documentation

- [ChoiceView App User Guides](#)

Other Quick Start reference deployments

- [AWS Quick Start home page](#)

Document revisions

Date	Change	In sections
July 2019	Initial publication	—

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