



Contact Center Artificial Intelligence

aka
CCAI

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Agenda

- What is AI
- AI Jargon
- Impact of AI in Contact Center
- Webex CCAI
- Demo
- Roadmap and, What's Next? And call for action



What is AI?



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Artificial Intelligence

Science and Engineering of
making intelligent Machine
~John McCarthy

Technical Evolution in 4 decades -Note taking Example

1990/2000

2000/2010

2010/2020

2020/2030

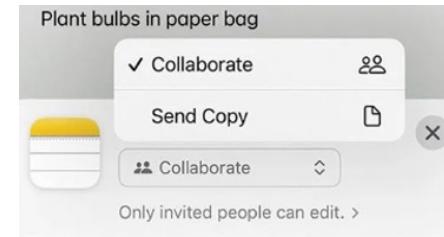


Y2K Problem

Mobile Evolution

Cloud Evolution

world of AI



collapse

summarize

Plant bulbs in paper bag

✓ Collaborate

Send Copy

Only invited people can edit.

Rewrite message

Original (read-only)

type this next

Your message is informal and neutral.

Let's take your message to the next level. Select your changes:

Improve Fix mistakes Format Shorter Longer

Formality Tone

Preview (read-only)

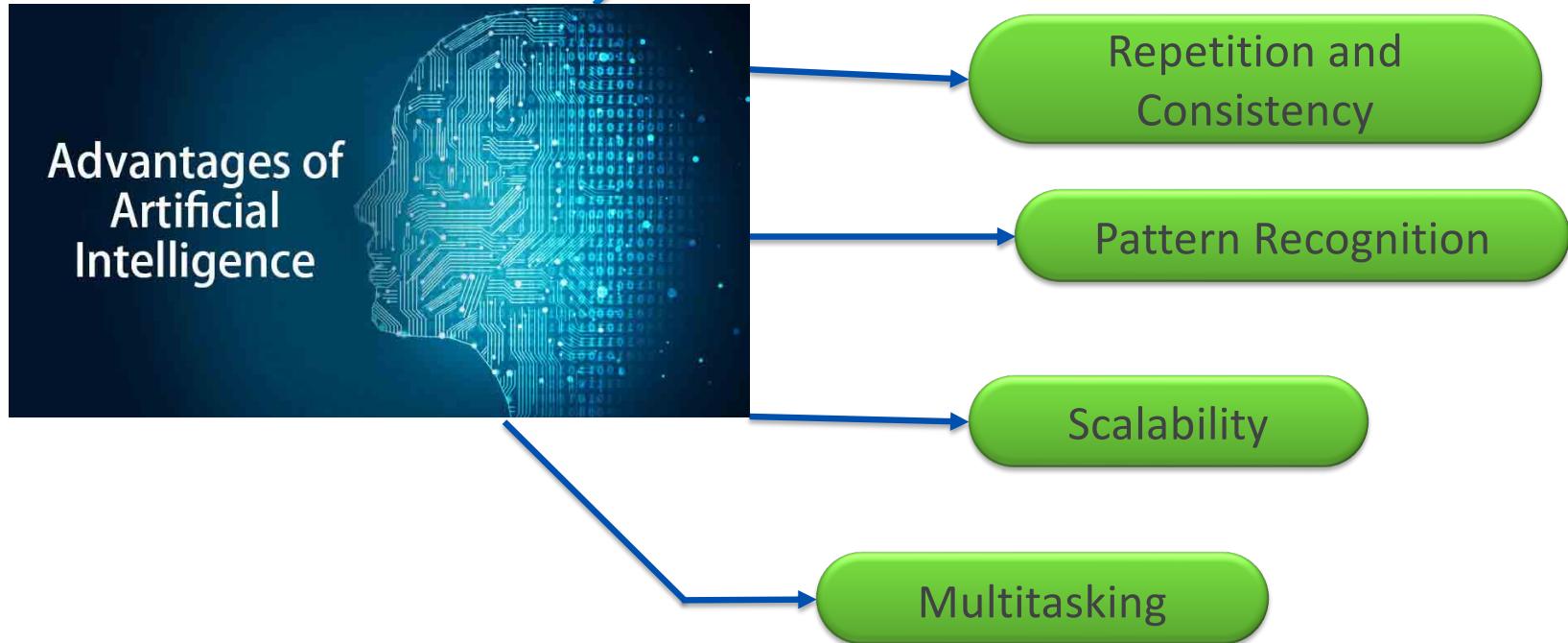
See how your message will look after you apply your changes

Update message Cancel



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Artificial Intelligence



Artificial Intelligence



Lack of Common Sense

Innovation

Emotional Intelligence

Ethical Decision-Making

Adaptability and Learning

[Cisco's Responsible AI](#)



Responsible AI



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The Responsible AI Framework

Guidance and Oversight 	<ul style="list-style-type: none">Establishes a Responsible AI Committee of senior executives across Cisco business units, sales, privacy, security, human rights, legal, government affairs, human resources, and other functions.Advises Cisco on responsible AI practices and oversees Responsible AI Framework adoption.Reviews sensitive or high-risk uses of AI proposed by our business units and incident reports of bias or discrimination.
Controls 	<ul style="list-style-type: none">Embeds security, privacy, and human rights processes into AI design as part of the existing Cisco Secure Development Lifecycle.Assesses AI functions for models and data directly involved in decisions that could have adverse legal or human rights impact.Applies controls to reduce risk of AI harm by focusing on areas like unintended bias mitigation, model monitoring, fairness, and transparency.
Incident Management 	<ul style="list-style-type: none">Leverages security, data breach, and privacy incident response system to manage reported AI incidents involving bias and discrimination.Assigns and reports incidents to the Responsible AI Incident Response Team to analyze and engage relevant team for resolution.Tracks and reports AI incidents to governance board and reports findings and remediation steps to the original submitter or a broader group of stakeholders, customers, employees, and partners.
Industry Leadership 	<ul style="list-style-type: none">Embeds Responsible AI as a focus area for incubation of new technology across Cisco.Engages with industry innovation providers focused on delivering Responsible AI.Participates proactively in industry forums to advance Responsible AI, including the Centre for Information Policy Leadership, Equal AI, and the Business Roundtable on Human Rights and AI.
External Engagement 	<ul style="list-style-type: none">Works with governments to understand global perspectives on AI's benefits and risks.Monitors, tracks, and influences AI-related legislation, emerging policy, and regulations.Partners with and sponsors cutting-edge research institutions, exploring the intersection of ethics and AI from technical, organizational, social, and design perspectives.

Synergy of AI and Human Intelligence

Augment & Automate

AI can augment human intelligence by automating routine tasks

Collaboration

Collaborate with AI

Learn, Analyze and Adapt

Helping AI to improve and adapt to new situations more effectively.



AI Jargons

Generative AI

Generative AI involves algorithms and models that **create new content**, such as **images, text, or music**, based on patterns learned from existing data.

GPT

Generative Pre-trained Transformer

LLM

Large Language Model

RAG

Retrieval-Augmented Generation (RAG) is the process of optimizing the output of a large language model

NLP

Natural language processing (NLP) is a machine learning technology that gives computers the ability to interpret, manipulate, and comprehend human language



Discriminative AI Vs Generative AI



Train → 

Model
Learns from relationship between **labels** and data

Could this be a dog?
Classify

Yes 



Train → 

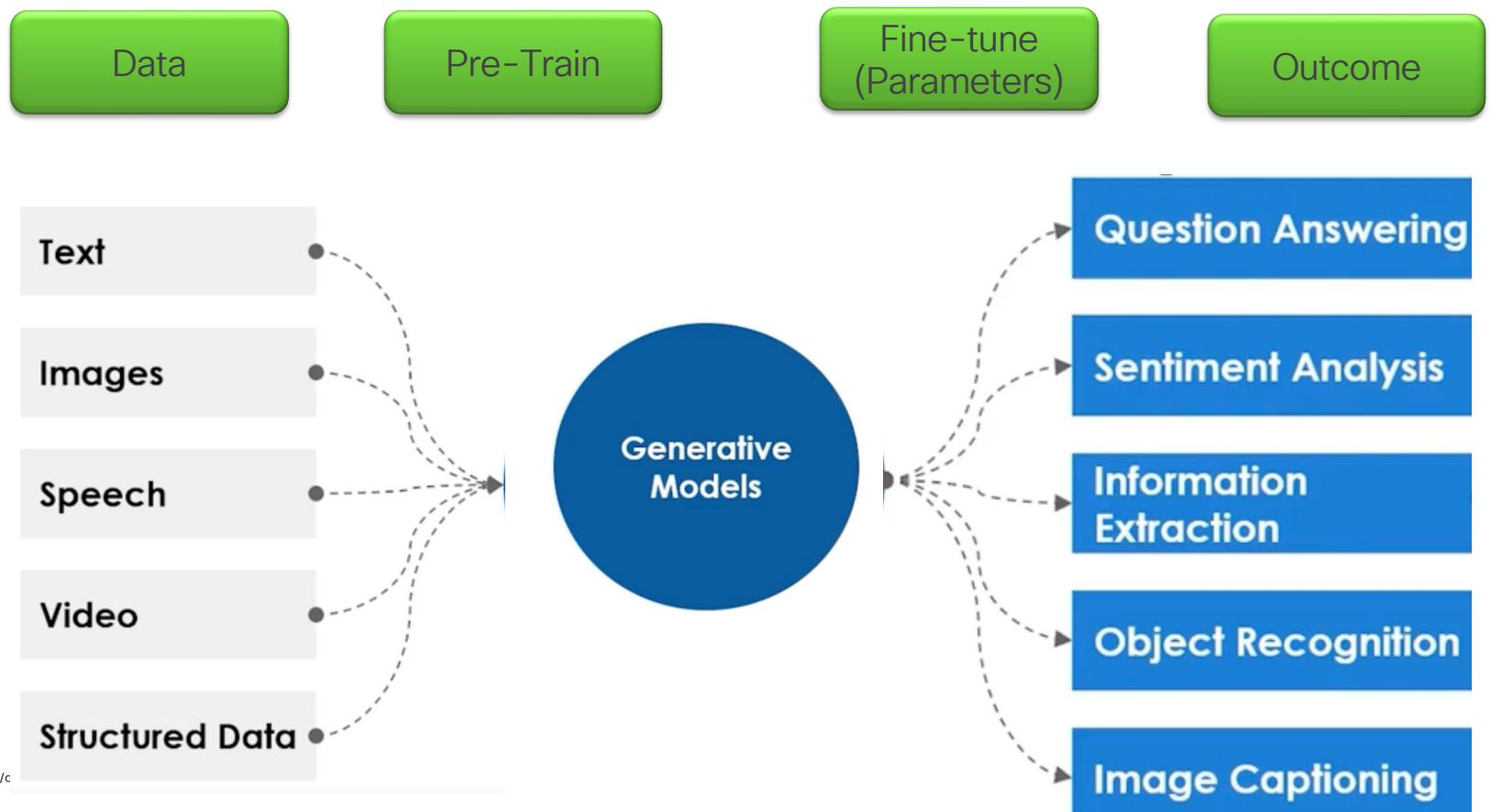
Model
Learns from patterns in large amounts of unstructured data

+
Other images on the internet

Create an image of dog, having fun in a party, wearing a black tuxedo with wine in one hand 

1. Cisco Confidential

Generative Model



LLM

Large, because 2 things

- Trained on large amounts of data
- Billions of trainable parameters

Language

because it deals with text data (takes input in text and generates output in text)

Model

because it predicts the next word



AI Hallucination + RAG

No Authentic Sources

Out of Date Information

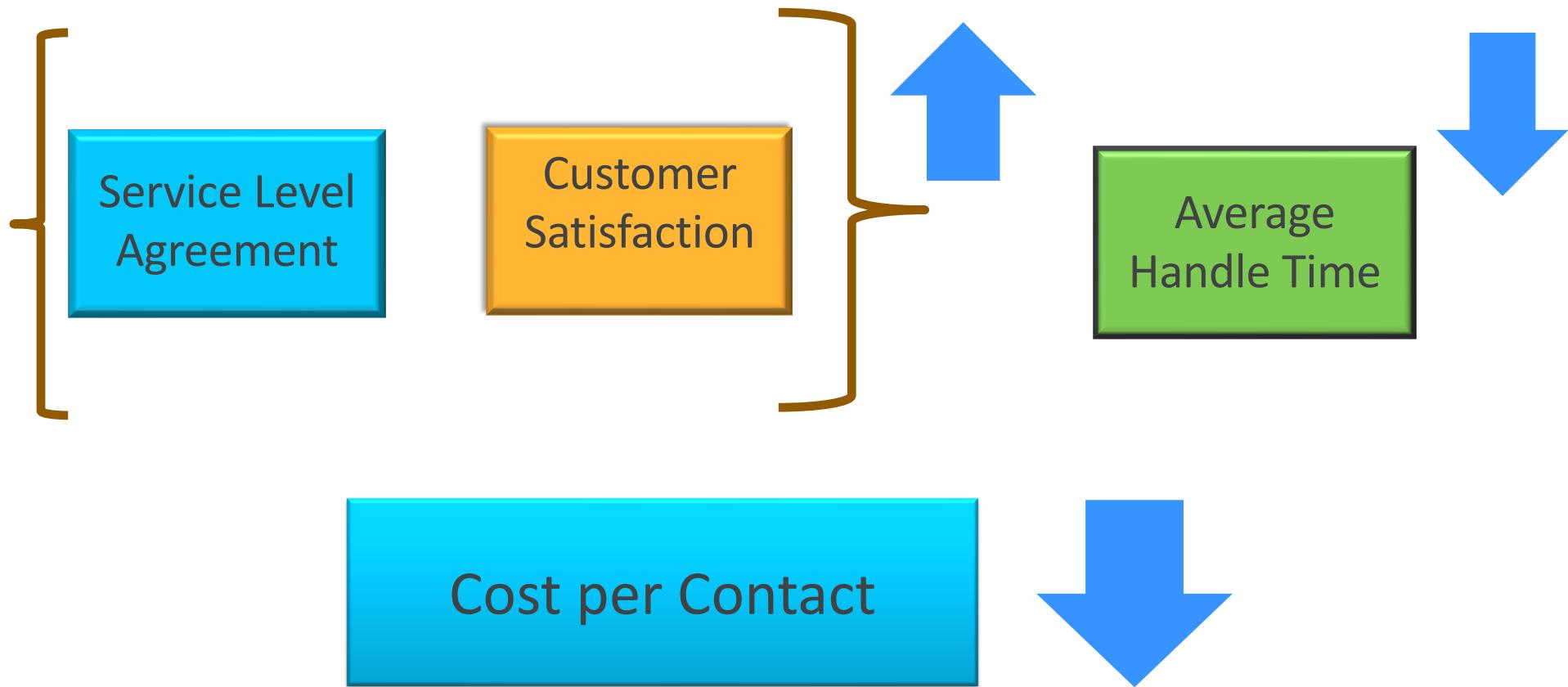


Some Key Findings !

- By YE 2024, 70% of ICC providers will use third party LLMs that they train on their own product and service information (80% probability)
- By YE 2025, to keep up with the need for the self-service support, 60% of the enterprises will offer virtual agents that are trained to answer common questions (70% probability)
- **Digital Customer Service, Conversational User Interfaces and Generative AI will Have the Biggest Impact on Customer Service and Support Strategies by 2028**



Important Contact center metrics



slido



What are some AI features you can think that could impact the contact center?

ⓘ Start presenting to display the poll results on this slide.

Impact of AI in Contact center

Augment & Automate

(automating routine tasks)

Virtual Agent
Voice Biometrics

Collaborate with AI

Auto Response
Agent burnout
Call drop Summary
Sentiment Analysis
Real time call
transcriptions

Learn, Analyze and Adapt

Helping AI to improve and adapt

Transcription analytics
Topic Modelling
Auto CSAT



Collaborate with AI

- Auto Response
- Agent burnout
- Call drop Summary
- Sentiment Analysis
- Real time call transcriptions





An AI Assistant that works for
agents and supervisors



Agent burnout

↓ CSAT, NPS

87%
of agents report
burnout



50%
of turnover attributed
to burnout

↓ Productivity



BEFORE:

Agent burnout business impact

25%

Increase in average handle
time (AHT)

2%

Drop in Customer
Satisfaction (%)

2x

more holds than usual

27%

more time spent
on call wrap ups



Agent wellness for the future

Proprietary AI-powered agent burnout detection and mitigation

Listen

Ingest platform data and intelligently surface data from vast resources.

Detect



Act

Real-time coaching and automated actions before and during interactions to support agents



Proactive and Automated APIs for partner integrations



Enable automated actions to mitigate impact of burnout

- Before call actions
- During call actions
- Burnout insights

Real time
insights

Real time burnout insights

Before call
actions

Call routing, Omnichannel allocation, Breaks, Schedule adjustments, Shift bidding, Thrive reset

During call
actions

Whisper coaching, Get help tool

Historic
insights

Periodic reports with insights, trends and recommended corrective measures



AFTER:

Trial results show
timely breaks
reduce impact of
burnout

4.8 to 4.9

Customer Satisfaction
Score increase



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4x

Improvement in
average handle time
(AHT)

13%

Decrease in reported
agent burnout levels



Powered by AI

desktop.wxcc-us1.cisco.com

Per PSM A2Q INCI Demos MT All Bookmarks

Webex Contact Center

1 2 Available 02:19

No tasks

All

No history

Call Settings Phone services are disconnected. Sign in E911 settings

Webex

FAQ

1) How does the system deduct when the agent is burned out?

Webex AI model calculates AI burnout indicator

2) What are the parameters used in Burnout Indicator?

Different Agent.state (Ex:Hold count, AHT) and Contact.state (CSAT)

3) How to participate in Beta program?

<https://gobeta.webex.com/>



An AI assistant that summarizes virtual agent interactions

The screenshot displays the Webex Contact Center interface. On the left, a sidebar shows a list of recent interactions, including calls to +1 (500) 432-3498, +1 (500) 499-3400, and Jason Welsch, all from the 'Ticketing_Queue' queue. The main panel shows a call with Michael Littlefoot from the 'Ticketing_Queue' queue. A modal window titled 'Cisco AI Assistant' provides a summary of the interaction:

Cisco AI Assistant

Here's the virtual agent transfer summary

Contact Reason: Michael needs to rebook his flight from Boston to Seattle

Handoff Reason: Requesting specific seat and specialized meal service

Details:

- Virtual Agent offered standard meal service for T2 flight type
- Michael is a gold star loyalty member

[View more details in the IVR Transcript](#)

The summary also includes a snippet of the IVR transcript:

11:36 AM • ⏴ ⏵

Destination Oakland
Date 30th of September
Flight Number 123 ⚠ Delayed

Flight Booking | ⓘ 11:16 AM

Source Salt Lake City
Destination Oakland
Date 30th of September

Flight Booking | ⓘ 11:14 AM

Reply STAY to stay on the flight
Reply CHANGE to see alternative flights
Reply CALL to receive a call from a customer support agent

Carlos Smith 11:15 AM
CALL

Sandra Jefferson joined this conversation. 29/9/2021, 11:16 PM

Hi Carlos, This is Sandra with Airline. I apologize that your flight delayed. I will be helping to find other alternatives.

Flight Booking



Call Drop Summary

Repeating problems to different agents can be frustrating for customers, leading to a poor customer experience. One instance where customers have to repeat themselves is when they get accidentally disconnected during an active interaction with an agent (either while talking or on hold) and then call back to get connected to a new agent. What if we provide a summary of the previous conversation to the new agent, so the customer doesn't have to repeat themselves? This will improve the customer experience and reduce call handle time for the second agent.

An AI assistant that summarizes dropped calls

The screenshot displays the Webex Contact Center interface. On the left, a sidebar shows a list of recent interactions: "Michael Littlefoot" (IVR_Queue_1 - 00:01) and "Jessica Marie" (IVR_Queue_1), both listed as 01:20. Below this, a "No history" message is shown. The main workspace is titled "Cisco AI Assistant" and contains a summary of a transferred call. It includes a message from Michael Littlefoot at 00:01, a transfer button, a conference button, and an end button. The summary details the contact reason (Michael needs to rebook his flight from Boston to Seattle) and the handoff reason (Requesting specific seat and specialized meal service). It also notes that Michael is a gold star loyalty member. A link to "View more details in the IVR Transcript" is provided. Another section titled "Take a look at this dropped call summary" discusses a "Call Drop. Booking Issues" where a customer booked a flight from Seattle to SJC but did not receive confirmation or a receipt. The call was dropped before resolution. A "Write a message to customer" input field is present at the bottom.



Webex Contact Center : Task X +

desktop.wxcc-us1.cisco.com

Webex Contact Center

1 1 Available 24:15

No tasks

All

+19842185090 Account | 00:19 10:40 PM

+19842185090 Account | 01:02 10:38 PM

+19842185090 Account | 04:16 10:28 PM

+19842185090 Account | 00:11 10:23 PM

+19842185090 Account | 00:05 10:21 PM



Call Drop Summary FAQ

1) How the systems deduct that the call is dropped?

Based on the Call Termination Type

2) Once the call is identified as dropped, the system fetches the recording and perform transcription



An AI assistant that suggests responses

The screenshot shows the Webex Contact Center software interface. On the left, there's a sidebar with icons for Home, Queue, and Skills. The main window displays a conversation with Michael Littlefoot, who has been in the queue for 00:01. The contact summary indicates he is experiencing suspicious transactions. A suggested response is provided:

Suggested Response:

Hi Michael, I apologize for the inconvenience. To dispute the transaction listed for \$51.52 at Renergize Restaurant [please log in to your online bank account](#) and navigate to 'Dispute a Transaction'. I can help you enroll and guide you through the process.

Below the suggestion, there are 'Send' and 'Remove' buttons. The status bar at the bottom shows 488 / 1000 and a 'Send' button. The right side of the screen shows a sidebar with 'Agent Answers' and 'Customer Protection' sections.



Webex Contact Center : Task

desktop.wxcc-us1.cisco.com/task/a2eda501-1be3-4ece-9ffd-cc89f337e3c2

Webex Contact Center

Alan Lane Chat_Sales_Q 01:33

Alan Lane 01:33 Transfer Conference End

A Alan@tmelidemo.com 3/19/2024, 1:08 AM | Received
Welcome to the TME Sales Chat!

A Alan@tmelidemo.com 3/19/2024, 1:08 AM | Received
Auto Generated
Welcome to the TME Sales Chat!

Name
Alan Lane ✓

Email
alan@tmelidemo.com ✓

Cleo Klein 3/19/2024, 1:08 AM | Delivered
Hello Alan Lane. Thanks for reaching out to our Sales Dept! How can I help you today?

A Alan@tmelidemo.com 3/19/2024, 1:09 AM | Received
How do I start using Webex?

Cleo Klein 3/19/2024, 1:09 AM | Delivered
To start using Webex, you can be up and running with basic features such as hosting a meeting or making a phone call immediately after purchase. You don't need to download the app in most cases, as Webex also works well in your browser. If you want to use all Webex features, such as making a PSTN call, you will need to download the app.

All Account | 0 03:33 01:04 AM
Account | 0 05:09 12:58 AM
Promotions | 0 01:47 12:54 AM
+19842185090 Account | 0 12:13 10:56 PM
+19842185090 Account | 0 04:19 10:45 PM

Customer Journey Call Drop Summary Auto Response Contact History

Auto Response

alan@tmelidemo.com: How do I start using Webex?
To start using Webex, you can be up and running with basic features such as hosting a meeting or making a phone call immediately after purchase. You don't need to download the app in most cases, as Webex also works well in your browser. If you want to use all Webex features, such as making a PSTN call, you will need to download the app.

Use this response

Write a message to alan@tmelidemo.com

0 / 2000 Send

An AI assistant that wraps-up calls

The screenshot shows the Webex Contact Center software interface. At the top, it displays "Webex Contact Center". On the left sidebar, there are icons for Home, Queue, and Skills. A main contact card for "Michael Littlefoot" is shown, with the identifier "IVR_Queue_1 - 00:01". The contact summary and wrap-up section includes a "Contact Summary" card with a "Positive" sentiment indicator. The summary text details a customer service interaction where Sandra J. assisted Mr. Littlefoot with suspicious transactions and package shipment issues. An "Actions" card lists a task to "Email copy of the guide for 'How to prevent credit card fraud' to customer". The "Wrap-up Reasons" section lists "Suspicious transaction" and "Travel credit card" as reasons, with an "Edit" button. At the bottom right, a large blue "Accept and submit" button is visible.



Learn, Analyze and Adapt

Helping AI to improve and adapt

Transcription analytics
Topic Modelling
Auto CSAT



Auto CSAT

Automatic customer satisfaction (CSAT) scores. This feature uses our native AI capabilities to predict post-interaction CSAT for customers, enabling contact centers to leverage every interaction for decision-making instead of the mere 3-10% of usual respondents to post-interaction surveys.



Auto Customer Satisfaction (CSAT) Score

Leverage 100% interactions for insights and decision making to maximize customer satisfaction and agent performance.

The screenshot shows the Webex Contact Center interface with a list of 56 recordings. The columns include Agent, Queue, Site, Team, AutoCSAT, ANI, DNIS, Duration, and Actions. The AutoCSAT column highlights the score for each recording, ranging from 1.3 to 4.8. The interface includes navigation icons and a search bar at the top.

Agent	Queue	Site	Team	AutoCSAT	ANI	DNIS	Duration	Actions	
JW	Joanna Wang	Queue #1	Site Name #1	Team Name #1	4.8	4088957541	+15307344001	00:01:41	▶
AJ	Austen Jones	Queue #3	Site Name #5	Team Name #2	3.2	4088957543	+15307344001	00:01:41	▶
CS	Clarissa Smith	Queue #2	Site Name #2	Team Name #3	2.0	4088957532	+15307344001	00:02:02	▶
KW	Kevin Woo	Queue #5	Site Name #3	Team Name #4	4.7	4088957591	+15307344001	00:00:26	▶
MB	Mathew Baker	Queue #4	Site Name #8	Team Name #5	1.9	4088957501	+15307344001	00:02:02	▶
JW	Joanna Wang	Queue #1	Site Name #1	Team Name #1	2.8	4088957541	+15307344001	00:01:41	▶
AJ	Austen Jones	Queue #3	Site Name #5	Team Name #2	3.4	4088957543	+15307344001	00:02:02	▶
CS	Clarissa Smith	Queue #2	Site Name #2	Team Name #3	4.1	4088957532	+15307344001	00:02:02	▶
KW	Kevin Woo	Queue #5	Site Name #3	Team Name #4	1.3	4088957591	+15307344001	00:02:02	▶
MB	Mathew Baker	Queue #4	Site Name #8	Team Name #5	3.2	4088957501	+15307344001	00:01:41	▶
JW	Joanna Wang	Queue #1	Site Name #1	Team Name #1	4.1	4088957541	+15307344001	00:02:02	▶
AJ	Austen Jones	Queue #3	Site Name #5	Team Name #2	2.5	4088957543	+15307344001	00:00:26	▶
CS	Clarissa Smith	Queue #2	Site Name #2	Team Name #3	1.5	4088957532	+15307344001	00:02:02	▶
KW	Kevin Woo	Queue #5	Site Name #3	Team Name #4	3.8	4088957591	+15307344001	00:01:41	▶
MB	Mathew Baker	Queue #4	Site Name #8	Team Name #5	2.0	4088957501	+15307344001	00:00:26	▶
JW	Joanna Wang	Queue #1	Site Name #1	Team Name #1	3.0	4088957541	+15307344001	00:02:02	▶
AJ	Austen Jones	Queue #3	Site Name #5	Team Name #2	4.8	4088957543	+15307344001	00:01:41	▶
CS	Clarissa Smith	Queue #2	Site Name #2	Team Name #3	1.9	4088957532	+15307344001	00:00:26	▶
KW	Kevin Woo	Queue #5	Site Name #3	Team Name #4	2.0	4088957591	+15307344001	00:01:41	▶
MB	Mathew Baker	Queue #4	Site Name #8	Team Name #5	3.2	4088957501	+15307344001	00:00:26	▶



Auto CSAT

Webex Contact Center

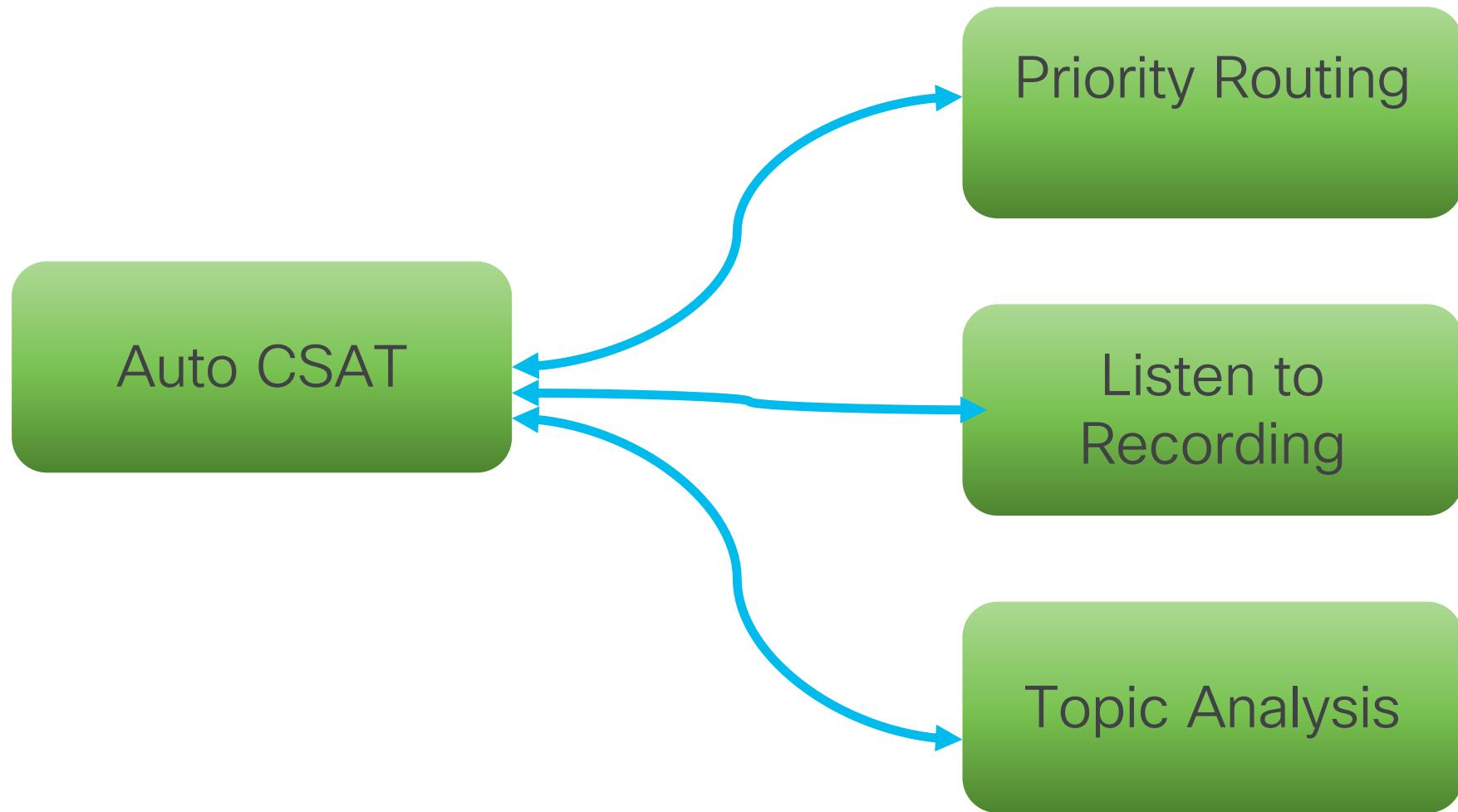
Recordings

Displaying 56 recordings

04/09/2023 12:00:00 AM - 04/10/2023 12:00:00 AM Filters

Agent	Queue	Site	Team	AutoCSAT	ANI	DNIS	Duration	Actions
JW Joanna Wang	Queue #1	Site Name #1	Team Name #1	4.8	4088957541	+15307344001	00:01:41	▷
AJ Austen Jones	Queue #3	Site Name #5	Team Name #2	3.2	4088957543	+15307344001	00:01:41	▷
CS Clarissa Smith	Queue #2	Site Name #2	Team Name #3	2.0	4088957532	+15307344001	00:02:02	▷
KW Kevin Woo	Queue #5	Site Name #3	Team Name #4	4.7	4088957591	+15307344001	00:00:26	▷
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JW Joanna Wang	Queue #1	Site Name #1	Team Name #1	2.8	4088957541	+15307344001	00:01:41	▷
AJ Austen Jones	Queue #3	Site Name #5	Team Name #2	3.4	4088957543	+15307344001	00:02:02	▷
CS Clarissa Smith	Queue #2	Site Name #2	Team Name #3	4.1	4088957532	+15307344001	00:02:02	▷
KW Kevin Woo	Queue #5	Site Name #3	Team Name #4	1.3	4088957591	+15307344001	00:02:02	▷
MB Mathew Baker	Queue #4	Site Name #8	Team Name #5	3.2	4088957501	+15307344001	00:01:41	▷
JW Joanna Wang	Queue #1	Site Name #1	Team Name #1	4.1	4088957541	+15307344001	00:02:02	▷
AJ Austen Jones	Queue #3	Site Name #5	Team Name #2	2.5	4088957543	+15307344001	00:00:26	▷
CS Clarissa Smith	Queue #2	Site Name #2	Team Name #3	1.5	4088957532	+15307344001	00:02:02	▷
KW Kevin Woo	Queue #5	Site Name #3	Team Name #4	3.8	4088957591	+15307344001	00:01:41	▷
MB Mathew Baker	Queue #4	Site Name #8	Team Name #5	2.0	4088957501	+15307344001	00:00:26	▷
JW Joanna Wang	Queue #1	Site Name #1	Team Name #1	3.0	4088957541	+15307344001	00:02:02	▷
AJ Austen Jones	Queue #3	Site Name #5	Team Name #2	4.8	4088957543	+15307344001	00:01:41	▷
CS Clarissa Smith	Queue #2	Site Name #2	Team Name #3	1.9	4088957532	+15307344001	00:00:26	▷
KW Kevin Woo	Queue #5	Site Name #3	Team Name #4	2.0	4088957591	+15307344001	00:01:41	▷
MB Mathew Baker	Queue #4	Site Name #8	Team Name #5	3.2	4088957501	+15307344001	00:00:26	▷





FAQ

1) How Auto CSAT is calculated

It's the machine learning model uses different contact.state (No. of times call was transferred, no of time call was put on hold, previous CSAT, etc)



Topic Analytics

Topic Collection

Rank ↑	Topics	Transcription count	Total transcriptions by %
> 1	Resetting Card PIN	11	8.09%
> 2	Interest Rate Updates	9	6.62%
> 3	Update Address Information	9	6.62%
> 4	Investigating Unauthorized Transactions	8	5.88%
> 5	Auto Loan Options	5	3.68%
> 6	Credit Card Options and Requirements	5	3.68%
> 7	Transfer Funds Instructions	5	3.68%
> 8	Update KYC Information	5	3.68%



Topic Analytics

Recognize and track operations and business trends in the contact center for rapid optimization.

- Surface trends in why customers are calling in to the contact center
- Use insights to create additional bots, self-service resources, or additional workflows to better serve customers
- Foundational capability for many other analytics use cases

webex Topic Analytics (beta)

Topic Analytics

Q2_FY24_ANALYSIS

Date created: 01/24/2024 • Transcriptions created for report: 136

Date range of report
11/14/2023 - 12/04/2023
0 filters applied See details

Total transcriptions analyzed
136
100.00% of total interactions for filter selected See details

Topic Collection

Rank	Topics	Transcription co...	Total transcriptions ...	Top contact reasons
1	Reset Card PIN	11	8.09%	Customer asked how to reset ATM debit card pin, Customer q...
2	Update Personal Informat...	9	6.62%	Customer queried how to update the address, Customer q...
3	Investigate Unauthorized ...	8	5.88%	Customer queried what can the bank do to investigate and...
4	Current Interest Rates for...	7	5.15%	Customer inquired about current interest rates, Customer i...
5	Auto Loan Options	5	3.68%	Customer inquired about auto loan options, Customer inqu...



Webex Control Hub

admin.webex.com/wxcc/ccoverview

Contact Center Overview

Main Menu

Contact Center

- Overview** (selected)
- CUSTOMER EXPERIENCE
 - Channels
 - Queues
 - Business Hours
 - Audio Prompts
 - Flows
 - Call Recording Schedules
 - Surveys
- USER MANAGEMENT
 - Sites
 - Skill Definitions
 - Skill Profiles
 - Teams
 - User Profiles
 - Contact Center Users
- DESKTOP EXPERIENCE
 - Multimedia Profiles
 - Outdial ANI

Search

Current cycle agent license usage

Billing cycle: March 4 - April 3

Agent license

Standard license under usage

under 1

- Standard license usage: 0 ⓘ
- Standard license purchased: 1 ⓘ

Premium license under usage

under 10

- Premium license usage: 0 ⓘ
- Premium license purchased: 10 ⓘ

Helpful resources

- What's new in Webex Contact Center
- Agent Desktop User Guide
- Supervisor Desktop User Guide
- Analyzer Desktop User Guide
- Flow Designer Guide
- Google CCAI Guide

Quick Links

Contact Center Suite

- Desktop
- Analyzer
- Create new flow
- Webex Contact Center Management Portal
- Topic Analytics (beta) ⓘ
- Webex Connect Bot Builder

Digital Channels

- Webex Engage

What's new

Multimedia Profiles
Create new and manage existing Multimedia Profiles.

Sites
Create new and manage existing Site. Associate your sites with multimedia profiles.

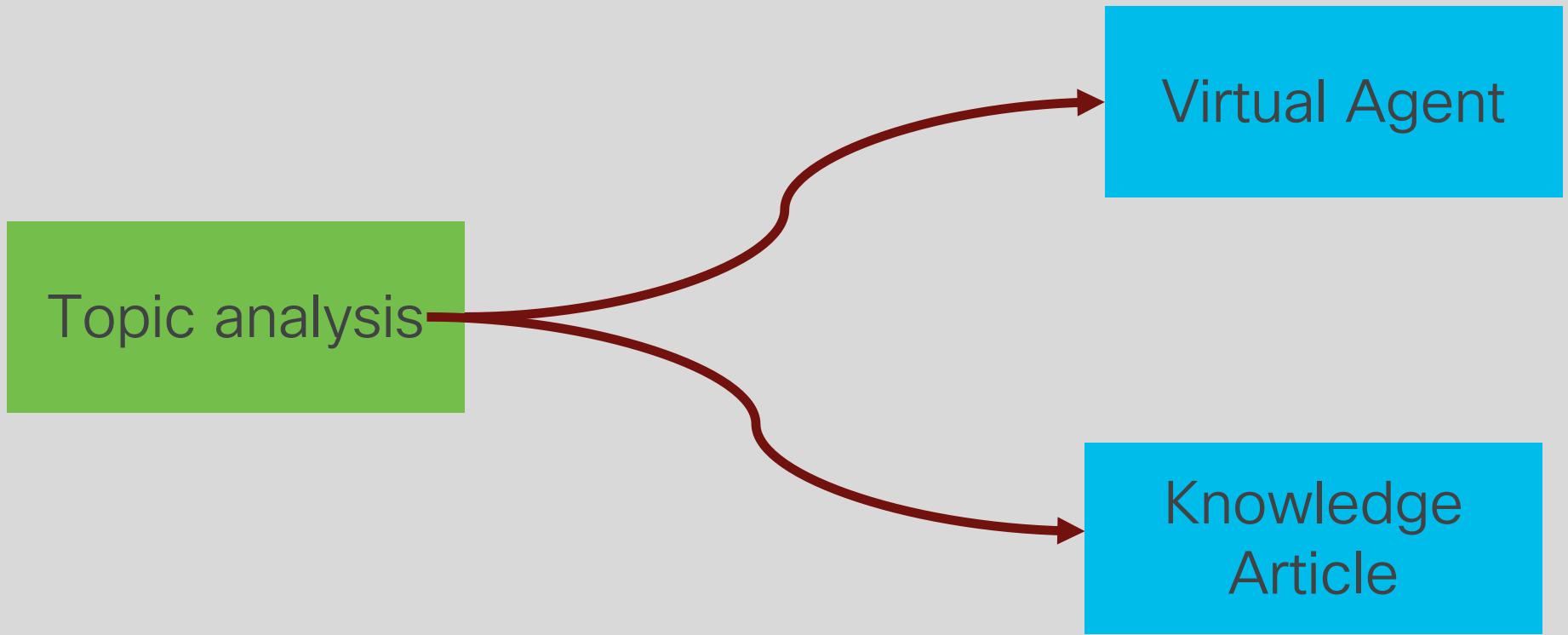
Teams
Create new and manage existing Team. Associate your teams with sites.

Skill Profiles
Create new and manage existing Skill Profiles.

Desktop Profiles
Create new and manage existing Desktop Profiles.

User Profiles
Create new and manage existing User Profiles.

How to use Topic Analysis



FAQ

- 1) Minimum 2000 English Recording should be available in the system for this feature to work
- 2) First MVP we are only support English



Augment & Automate

(automating routine tasks)

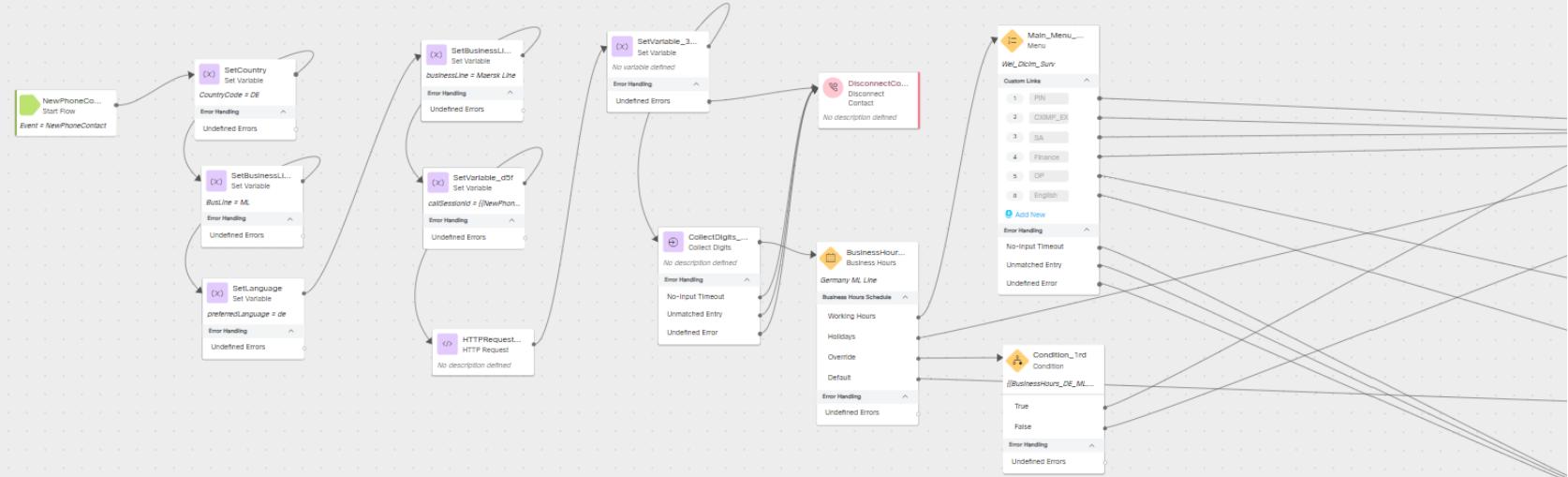
Virtual Agent
Voice Biometrics



[Main Flow](#)[Event Flows](#)[Help](#)[Search Flow](#)

Ctrl K

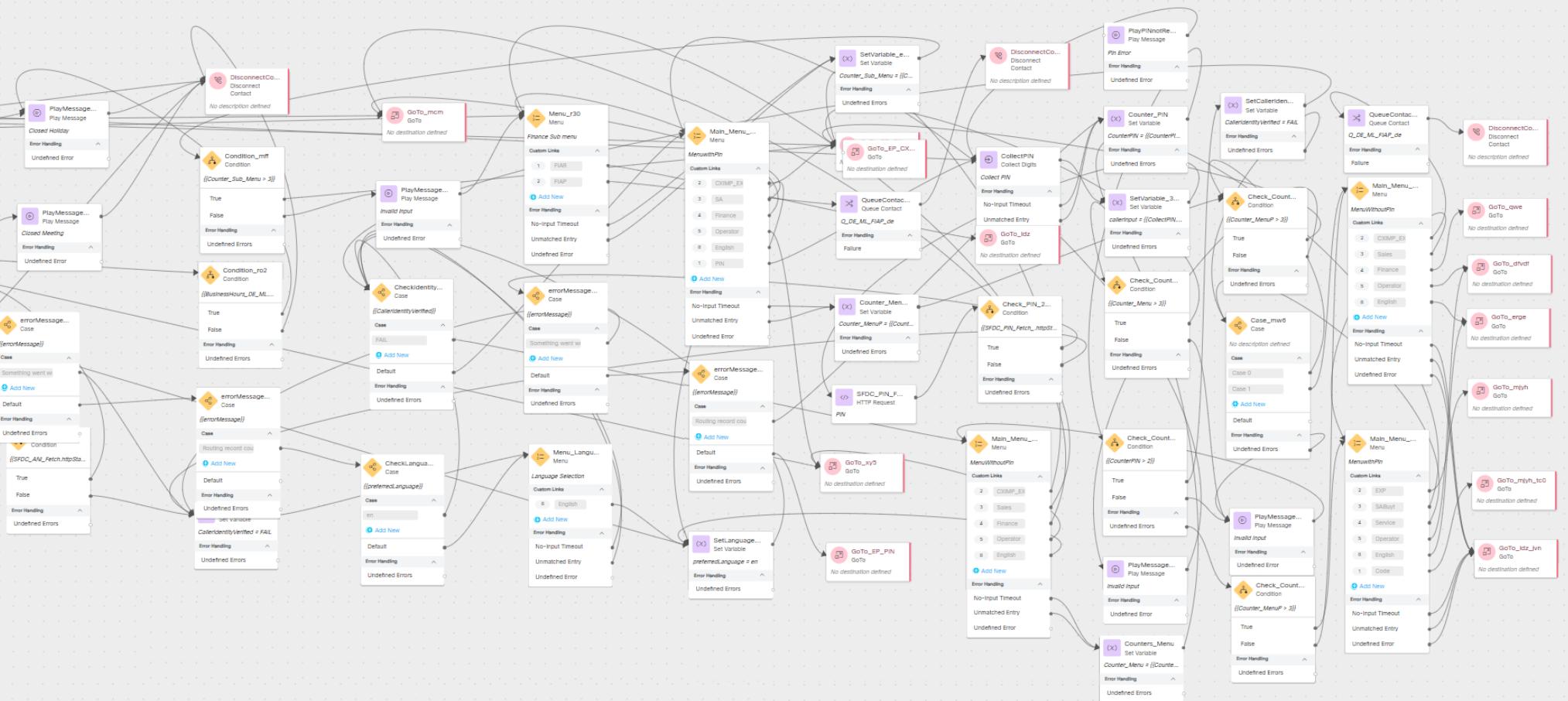
≡



Main Flow

Event Flows

Help

Search Flow 

Main Flow

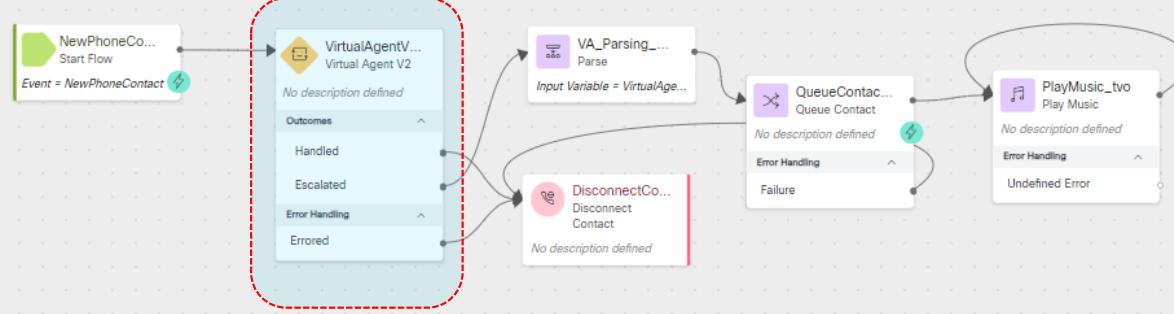
Event Flows

Help

Search Flow

Ctrl K

=



Fundamental Bot Elements

Intent

What client wants?

Training Phrases

Help the bot understand user input

Entities

Help to identify and extract information or parameters from the user's input

Fulfillments

Actions the bot takes after understanding the user's intent

Contexts

Maintain information across multiple turns of the conversation

Webhooks

Call external application/database to do something.



Intents

What are intents?

- Something that end-user wants to execute or might ask for
- Help bots to determine what is needed
- You might know it as „Articles” in some bot types

I'm sorry but, currently
this position is taken

Hi, I want to rule the world!

I want to escalate!



Training Phrases, Utterances or Variants

- An alternate way of signaling an intent
- Similar to a phrase dictionary
- Should be well trained to recognize various if intents

Get me account status

How much do I have in my wallet?

I want to create an order

I want to sell all my positions

Intent: `CheckBalance-1`

Intent: `CreateOrder-1`



What are Entities?

- Used to identify and extract specific data from end-user expressions
- Entities are usually nouns or qualifiers in your dialogue

Who

What

When

Where

What is the current price of a bitcoin?

→ **@sys.currency-name > BTC (Bitcoin)**

My name is John

→ **@sys.person > John**

What is Cisco office address in
Richardson?

→ **@.sys.city > Richardson**

Fulfillments and Contexts

Fulfillments/Responses

- Making the magic happen
- Provide an answer to a question
- Looking up information on an external system (webhooks)

Contexts

- Conversation controller paths OR link the answers just as people do.
- A silent yet understood, “Is there anything else that I can do for you?”
- Can be based on the intent
- Can erode after N questions

What's the Weather in Richardson?

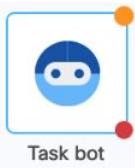
It's very cold. Stay home and watch TV.

What about tomorrow?

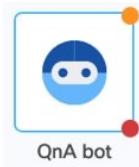


Choosing the Right Fit

Cisco's BoT



Bot Builder Task
Bot



Bot Builder Question
and Answer

3rd Party BoT



Dialogflow CX

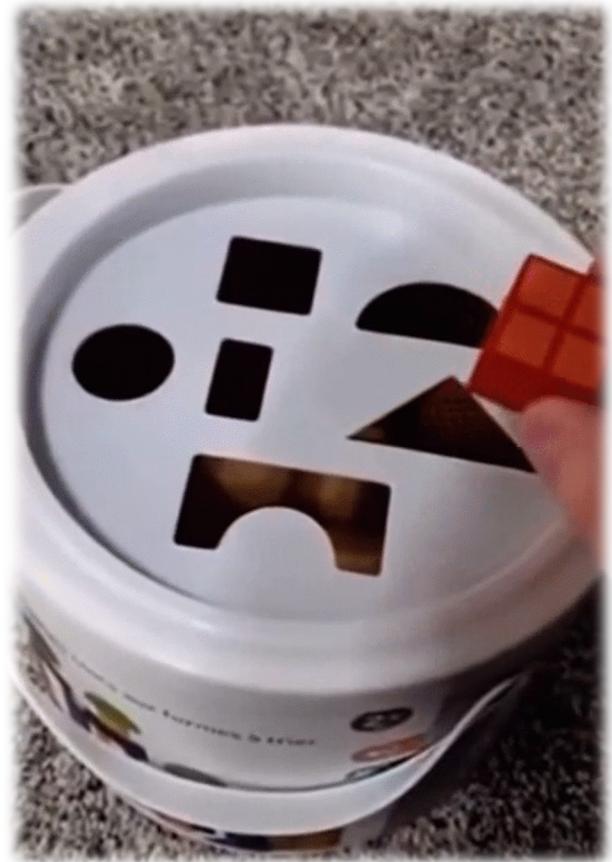


Dialogflow
Essentials

ByoBOT



More on the way



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Introducing TASK BOT for Voice !



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Highly Reusable

- Same BoT can be trained across Multiple Channel including Voice

Highly
Reusable

Import
Theme from
Catalogues

Ease of
Use

BOT
Curation

Session
&
History

BOT Curation

Easily Optimize BOT's performance

Session & History

Analyze, and improve the BOT
Response

BOT

Import Theme from catalogues

Articles can be readily uploaded from themes

Live Demo Task Bot



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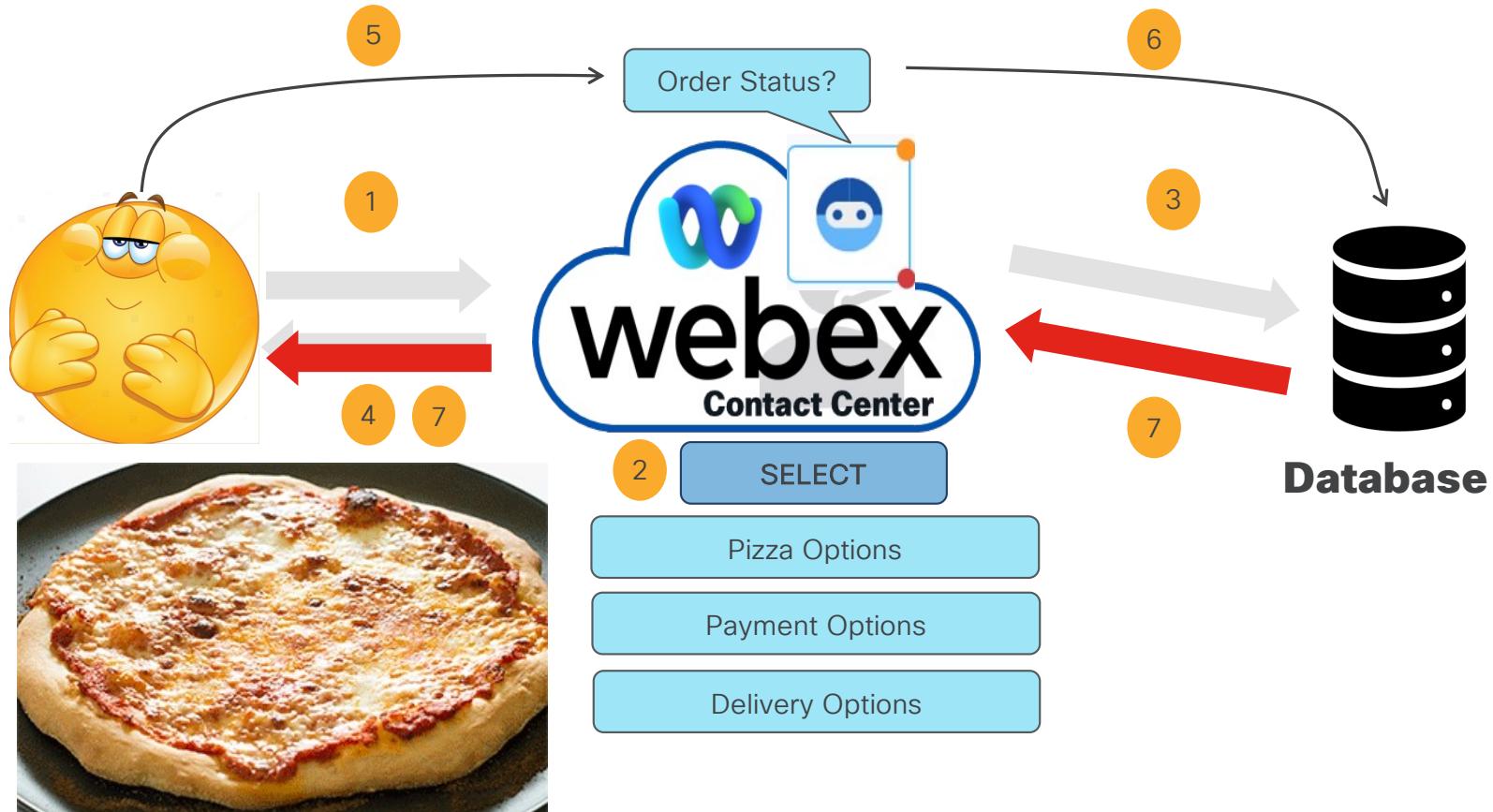
UseCase: Cisco Pizza



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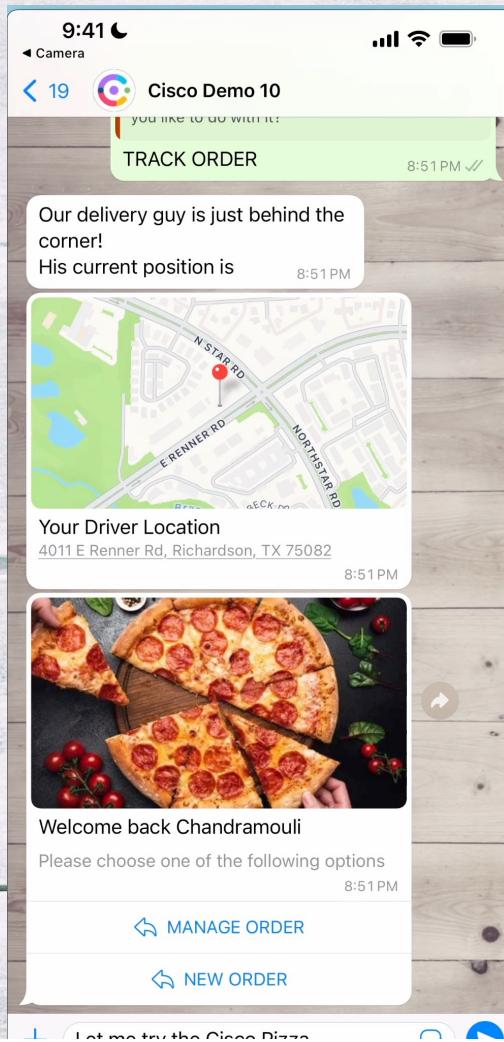
USE CASE – Cisco Pizza



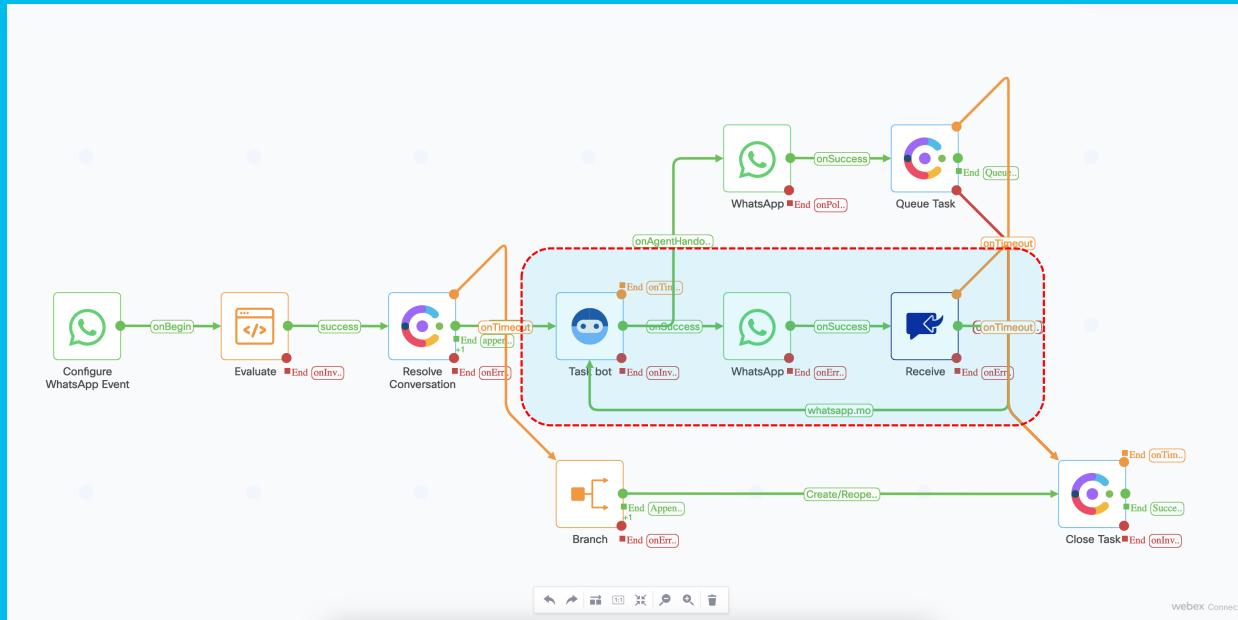
Let's Order Some Pizza



Let's Order Some Pizza



WxConnect Bot Flow



Call for Action



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Participate in Beta

Webex-Beta



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Takeaways

1 Sign up for Webex Beta

2 Participate in Task Bot EFT

3 WebexCC [Documentation](#)

4 WebexCC [Blog](#)

5 Holger AI Calculation on Cost Saving

6 Google Integration slides are shared





The bridge to possible

Configuration Elements: DialogFlow CX



Dialogflow CX/ES

Dialogflow ES (Essentials)

Like a basic story with choices. You ask questions (intents) and the user picks a path based on their answers (contexts)

Dialogflow CX (Customer Experience)

A branching story with pages, like a choose-your-own-adventure book.

Feature	Dialogflow ES	Dialogflow CX
Complexity	Simpler	More complex
Building blocks	Intents, contexts	Flows, pages, states, handlers
Good for	Small projects, beginners	Complex projects, advanced users
Price	Cheaper	More expensive



Dialogflow CX/ES

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(Essentials)

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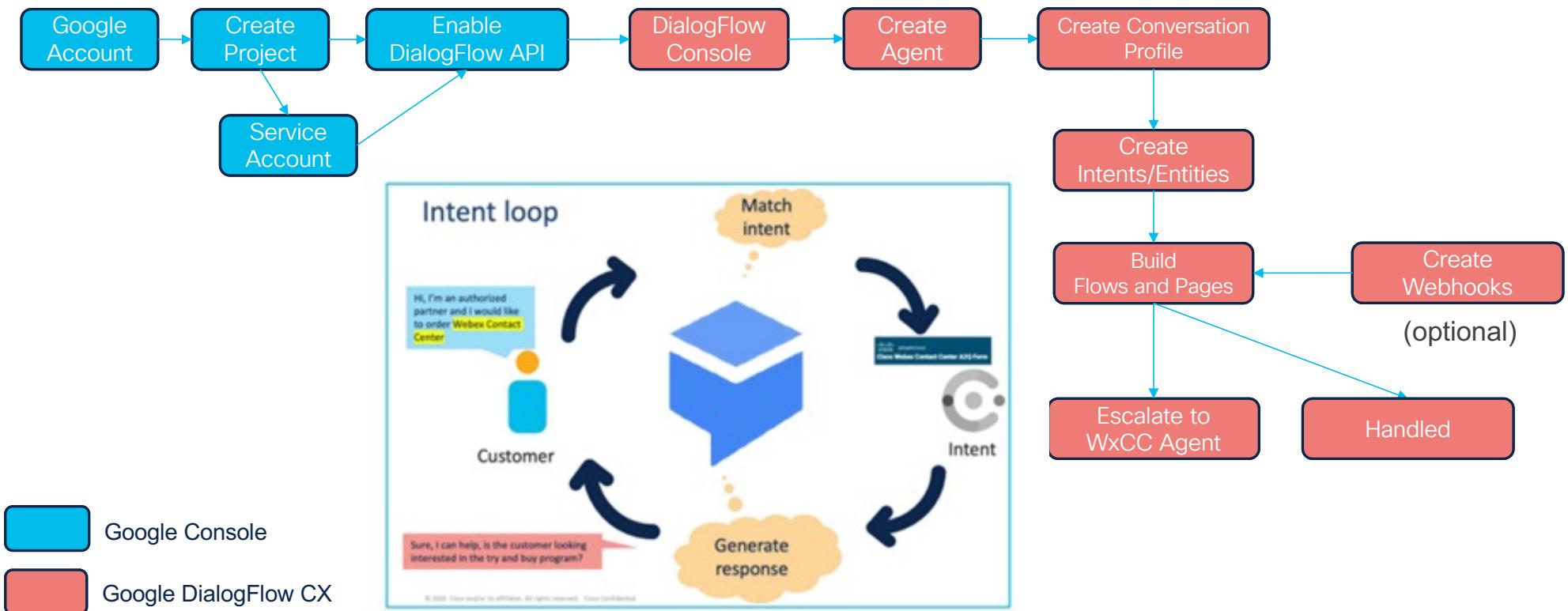
Dialogflow CX/ES

Dialogflow ES (Essentials)	Like a basic story with choices. You ask questions (intents) and the user picks a path based on their answers (contexts)
Dialogflow CX (Customer Experience)	A branching story with pages, like a choose-your-own-adventure book.

Feature	Dialogflow ES	Dialogflow CX
Complexity	Simpler	More complex
Building blocks	Intents, contexts	Flows, pages, states, handlers
Good for	Small projects, beginners	Complex projects, advanced users
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Configuration Flow – DialogFlow CX





CCAI Configuration

Dialogflow CX

Project --

② X ⚫ W

Select Project

Search projects

All

Name	Project ID
CL2024AMS	cl2024ams

New Project Cancel

Enterprise customers can create conversational experiences in minutes

Create a project Learn more

Quick access to useful resources

Documentation Empower human agents with continuous support during live calls.

Learn more about Documentation

Tutorial Video Create conversational experiences across devices and platforms.

Watch Tutorial Video

Terms of Service Privacy



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Dialog Flow CX - Building Blocks

The screenshot displays the Dialogflow CX interface with the following details:

- Project:** CL2024AMS
- Agent:** CL2024Ag
- Language:** en
- Flow:** CreateOrder-F (selected)
- Start Page:** Start Page
- Nodes in Flow:**
 - BuyOrSellAction-P
 - TickerName
 - DirectionalOrder-P
 - QuantityAmmount-P
 - Confirmation-P
 - ClearAllPositions-P
 - SellAll-Webhook-P
 - BuyWebhook-P
 - AnythingElse-P
- AnythingElse-P Node Configuration:**
 - Description: Can I do anything else for you?
 - Entry fulfillment: Can I do anything else for you?
 - Parameters: confirmation.yes-l, confirmation.no-l, Live Agent Transfer
 - Routes: BotOffer-F
- Fulfillment Configuration:**
 - Agent says:** Sure, no problem. Let me connect you to an agent
 - Enter agent dialogue:** Add
 - Live agent handoff:**

```

1 {
2   "dialogflow.ccai.live-agent-escalation": {
3     "LastOrderType": "$session.params.orderType-e",
4     "LastActionSide": "$session.params.actionSide",
5     "LastCurrencyName": "$session.params.currency-name",
6     "LastOrderId": "$session.params.orderId",
7     "LastOrderQuantity": "$session.params.number"
8   }
}

```
 - Add dialogue option:**
 - Channel specific responses:**



Dialog Flow CX - Building Blocks

The screenshot illustrates the Dialogflow CX interface with several key components highlighted:

- Project Name:** CL2024AMS
- Agent Name:** CL2024Ag
- Language:** en
- Search in the agent**
- Running Operations**
- Help**
- Test your bot**
- Current Flow:** CreateOrder-P
- Flows:** Default Start Flow, AccountStatus-F, BotOffer-F, CheckPrice-F, CreateOrder-F
- Pages:** Start Page, AnythingElse-P, BuyOrSellAction-P, BuyWebhook-P, ClearAllPositions-P, Confirmation-P, DirectionalOrder-P, QuantityAmmount-P, SellAll-Webhook-P, SellOrder-P, TickerName, TicketNameSell
- Zoom and rotation**
- Minidump:** A preview window showing the flow structure.
- Active User:** W
- Publish Settings:** Publish, Agent settings, Test Agent
- Agent Settings:** Fulfillment, Parameter presets, Generators, Agent responses
- Page Settings:** Description, Edit description, Entry fulfillment, Can I do anything else for you?, Parameters, Routes, confirmation.yes-l, confirmation.no-l, Live Agent Transfer, Add state handler
- Reply to client:** Agent says (Sure, no problem. Let me connect you to an agent), Enter agent dialogue, Add, Live agent handoff (JSON code snippet)
- Handoff to Webex CC / Metadata:** JSON code snippet for live agent handoff.
- Main Canvas:** The central workspace where flows and pages are built.
- Menu Panel:** Build, Manage, FLOWS, PAGES, etc.

Dashed red arrows point from the labels to the corresponding UI elements, indicating the components being discussed in the video.

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Dialog Flow CX - Building Blocks

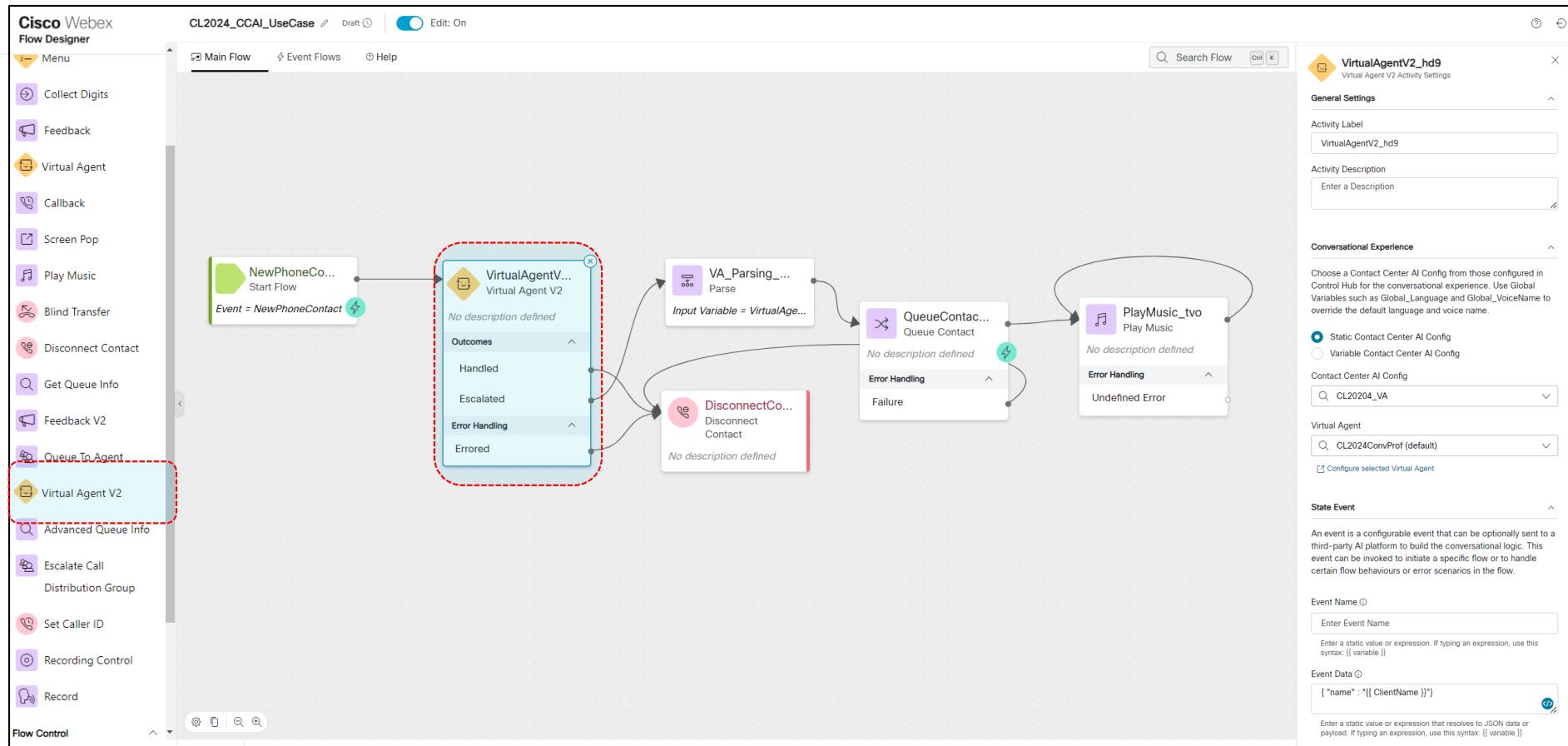
The image shows two screenshots of the Dialog Flow CX interface. The left screenshot displays a state editor for a state named 'AnythingElse-P'. It includes sections for 'Description' (with an 'Edit description' button), 'Entry fulfillment' (with a message 'Can I do anything else for you?'), 'Parameters' (with a '+' button), and 'Routes' (listing 'confirmation.yes-I', 'confirmation.no-I', and 'Live Agent Transfer'). A red dashed box highlights the 'Routes' section. Below these are buttons for 'Add state handler' and 'Add state transition'. The bottom of the state editor shows icons for 'BotOffer-F' and 'End Flow'. A red arrow points from the 'Live Agent Transfer' route in the state editor to the 'Agent responses' section of the right screenshot. The right screenshot shows the 'Fulfillment' configuration page. It includes sections for 'Parameter presets', 'Generators', and 'Agent responses'. Under 'Agent responses', there is a 'Agent says' section with the message 'Sure, no problem. Let me connect you to an agent' and a 'Enter agent dialogue' input field. Below this is a 'Live agent handoff' section containing a JSON code block:

```
1 {
2   "dialogflow.ccaI.live-agent-escalation": {
3     "LastOrderType": "$session.params.ordertype-e",
4     "LastActionSide": "$session.params.actionside",
5     "LastCurrencyName": "$session.params.currency-name",
6     "LastOrderID": "$session.params.orderId",
7     "LastOrderQuantity": "$session.params.number"
8   }
}
```

At the bottom of the fulfillment configuration page are buttons for 'Add dialogue option' and 'Channel specific responses'.

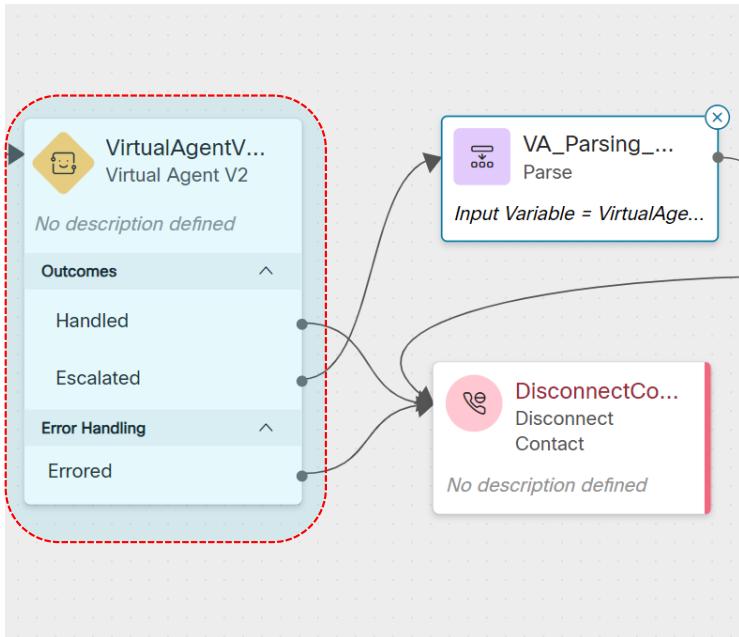


Webex CC Flow for CCAI



Webex CC Flow for CCAI

Virtual Agent V2



VirtualAgentV2_hd9
Virtual Agent V2 Activity Settings

General Settings

Activity Label: VirtualAgentV2_hd9

Activity Description: Enter a Description

Conversational Experience

Choose a Contact Center AI Config from those configured in Control Hub for the conversational experience. Use Global Variables such as Global_Language and Global_VoiceName to override the default language and voice name.

Static Contact Center AI Config
 Variable Contact Center AI Config

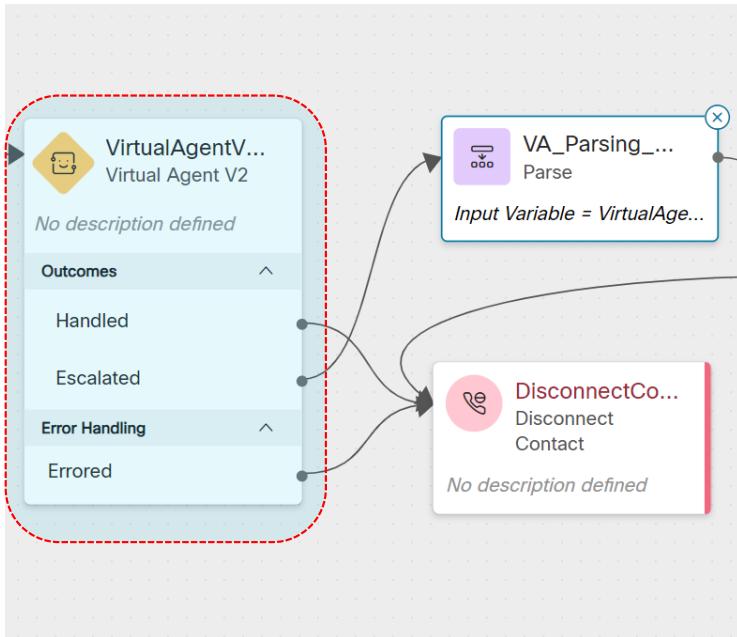
Contact Center AI Config: CL20204_VA

Virtual Agent: CL2024ConvProf (default)

[Configure selected Virtual Agent](#)



Webex CC Flow for CCAI



VirtualAgentV2_hd9
Virtual Agent V2 Activity Settings

General Settings

Activity Label
VirtualAgentV2_hd9

Activity Description
Enter a Description

Conversational Experience

Choose a Contact Center AI Config from those configured in Control Hub for the conversational experience. Use Global Variables such as Global_Language and Global_VoiceName to override the default language and voice name.

Static Contact Center AI Config
 Variable Contact Center AI Config

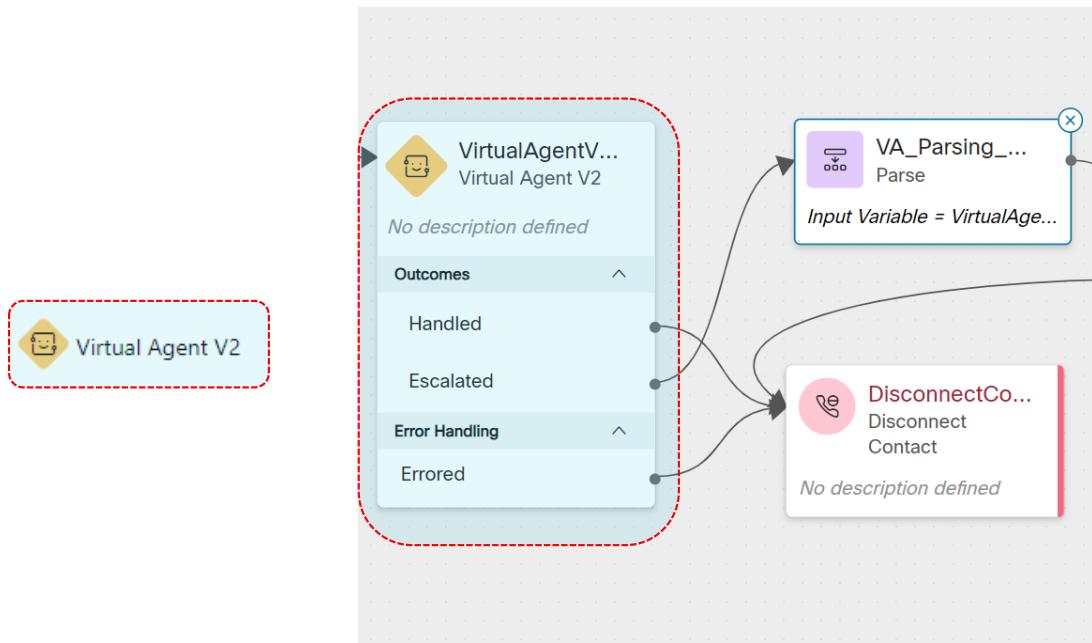
Contact Center AI Config
CL20204_VA

Virtual Agent
CL2024ConvProf (default)

[Configure selected Virtual Agent](#)



Webex CC Flow for CCAI



The screenshot shows the configuration for a "State Event" in the Webex CC Flow interface. The search bar at the top shows "CL20204_VA".

Virtual Agent: Set to "CL2024ConvProf (default)".
 Configure selected Virtual Agent

State Event

An event is a configurable event that can be optionally sent to a third-party AI platform to build the conversational logic. This event can be invoked to initiate a specific flow or to handle certain flow behaviours or error scenarios in the flow.

Event Name ⓘ
Enter Event Name

Enter a static value or expression. If typing an expression, use this syntax: {{ variable }}

Event Data ⓘ

```
{ "name" : "{{ ClientName }}" }
```

Enter a static value or expression that resolves to JSON data or payload. If typing an expression, use this syntax: {{ variable }}

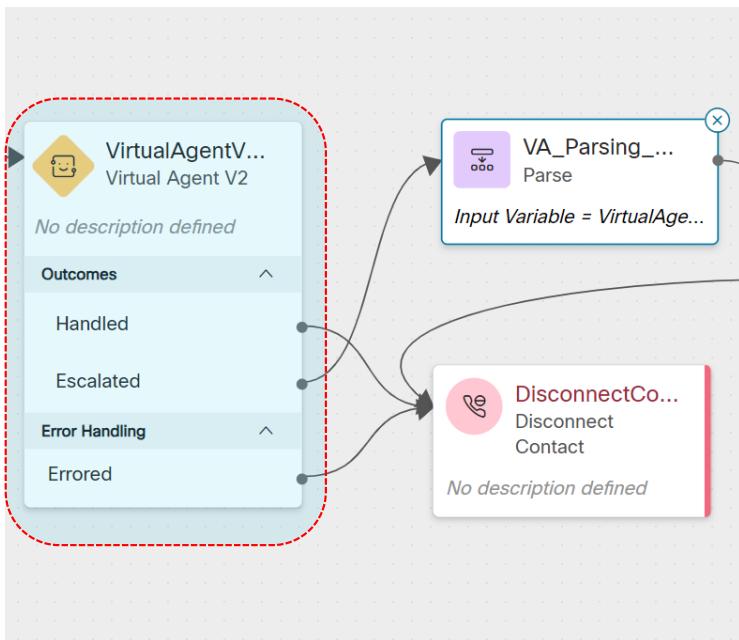
Advanced Settings

Termination Delay ⓘ seconds

Speaking Rate ⓘ



Webex CC Flow for CCAI



{ "name" : "{{ ClientName }}" }
</>

Enter a static value or expression that resolves to JSON data or payload. If typing an expression, use this syntax: {{ variable }}

Advanced Settings

Termination Delay ⓘ seconds

Speaking Rate ⓘ

Enter a static value or expression that resolves to a number between 0.25 and 4.0. If typing an expression, use this syntax: {{ variable }}

Volume Gain ⓘ decibels

Enter a static value or expression that resolves to a number between -96.0 and 16.0. If typing an expression, use this syntax: {{ variable }}

Pitch ⓘ Hz

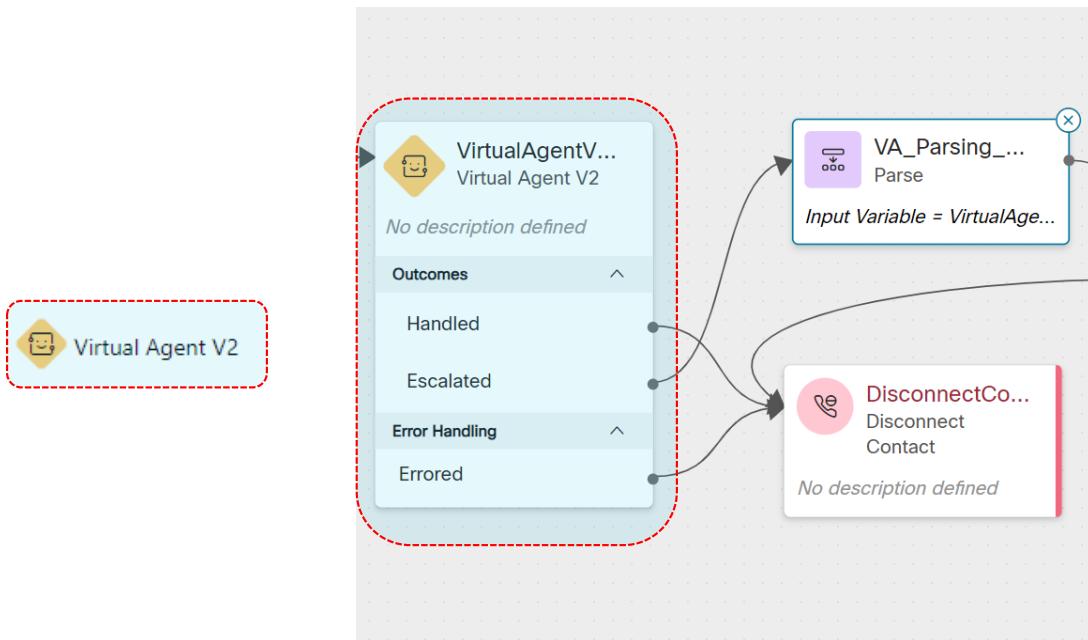
Enter a static value or expression that resolves to a number between -20.0 and 20.0. If typing an expression, use this syntax: {{ variable }}

Enable Conversation Transcript

Allow Desktop to display the transcript of the conversation between the VAV and the customer. The raw transcript is also available via a dynamic URL which can be used to extract specific sections from the transcript with a HTTP request.



Webex CC Flow for CCAI



Enter a static value or expression that resolves to a number between 0.25 and 4.0. If typing an expression, use this syntax: {{ variable }}

Volume Gain ⓘ

0.0 decibels

Enter a static value or expression that resolves to a number between -96.0 and 16.0. If typing an expression, use this syntax: {{ variable }}

Pitch ⓘ

0.0 Hz

Enter a static value or expression that resolves to a number between -20.0 and 20.0. If typing an expression, use this syntax: {{ variable }}

Enable Conversation Transcript

Allow Desktop to display the transcript of the conversation between the VAV and the customer. The raw transcript is also available via a dynamic URL which can be used to extract specific sections from the transcript with a HTTP request.

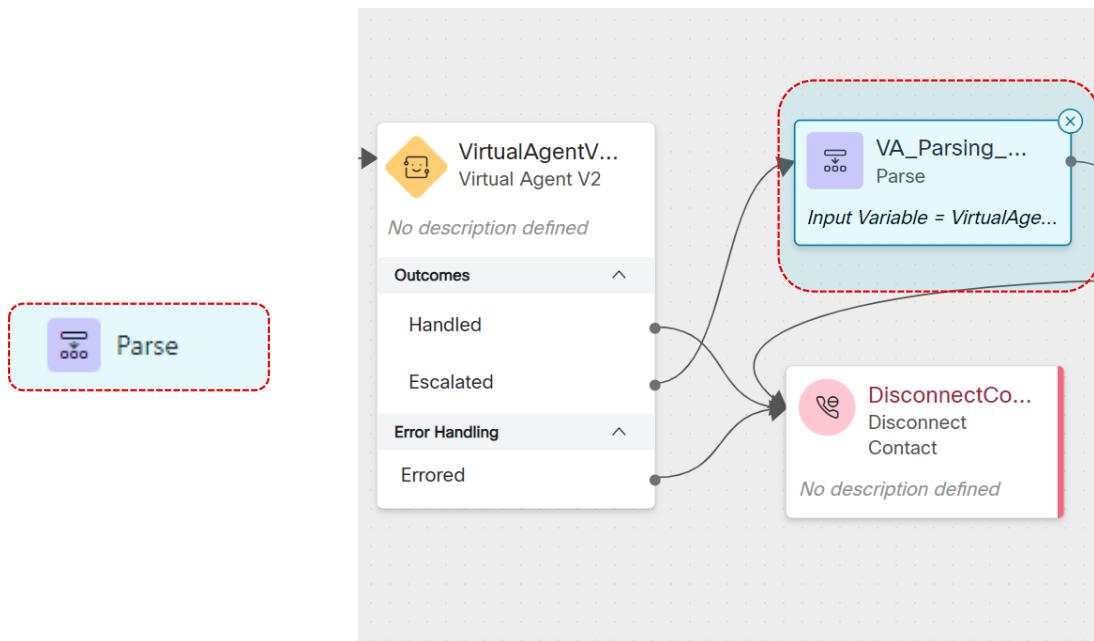
Activity Output Variables

- VirtualAgentV2_hd9.TranscriptURL
- VirtualAgentV2_hd9.MetaData
- VirtualAgentV2_hd9.StateEventName

ave



Webex CC Flow for CCAI



The screenshot shows the configuration settings for the "VA_Parsing_Response" activity. The "General Settings" section includes:

- Activity Label:** VA_Parsing_Response
- Activity Description:** Enter a Description

The "Parse Settings" section includes:

- Input Variable:** VirtualAgentV2_hd9.MetaData
- Content Type:** JSON

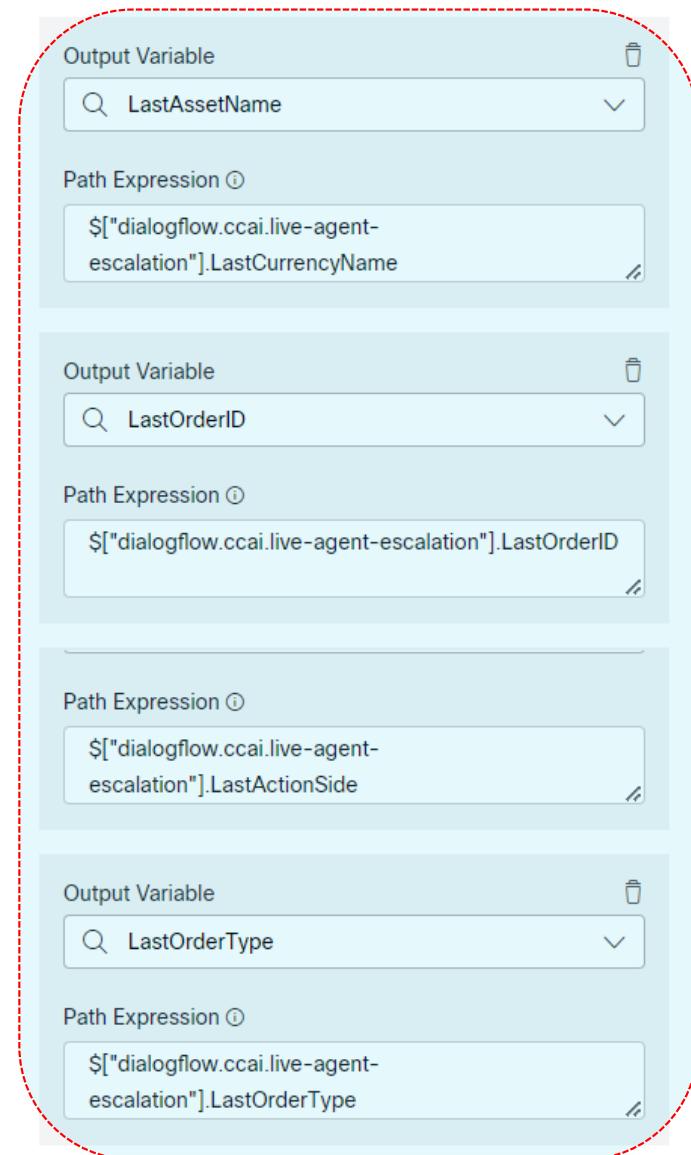
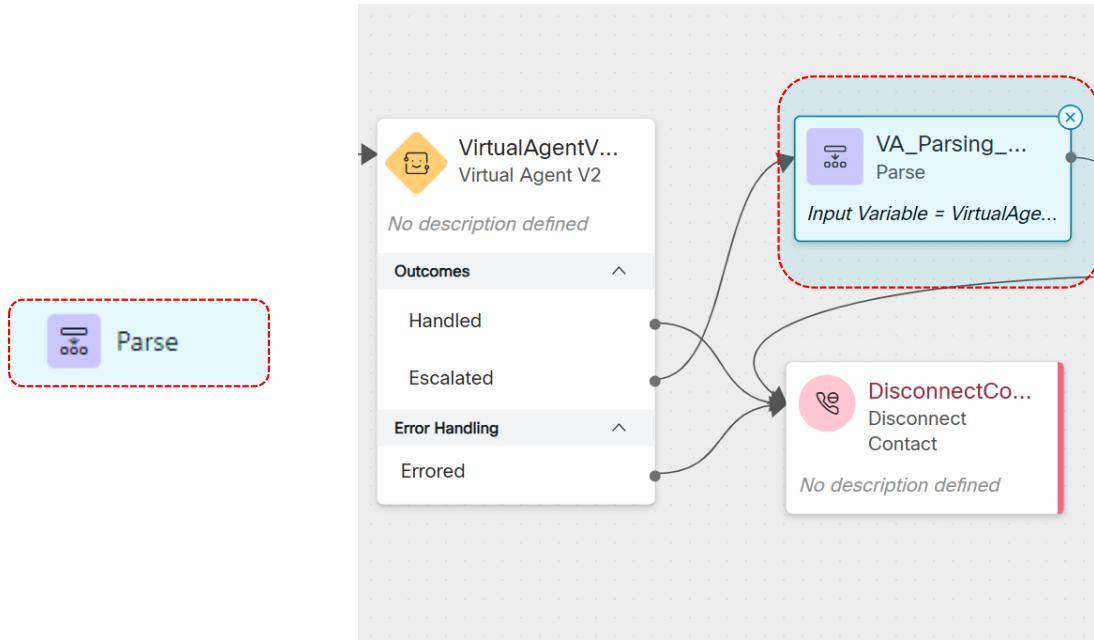
The "Output Variable" section includes:

- Output Variable:** LastAssetName

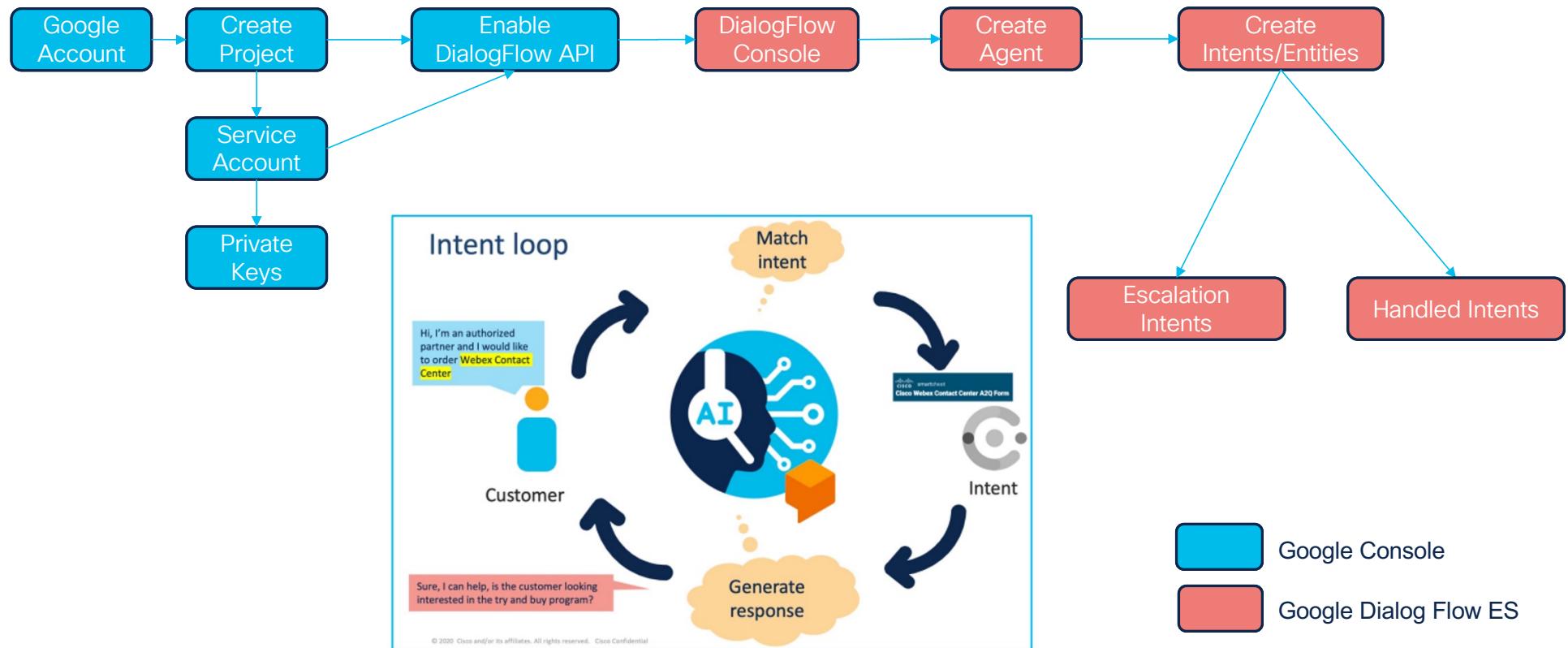
The "Path Expression" section contains the expression: `$["dialogflow.ccai.live-agent-escalation"].LastCurrencyName`.



Webex CC Flow for CCAI



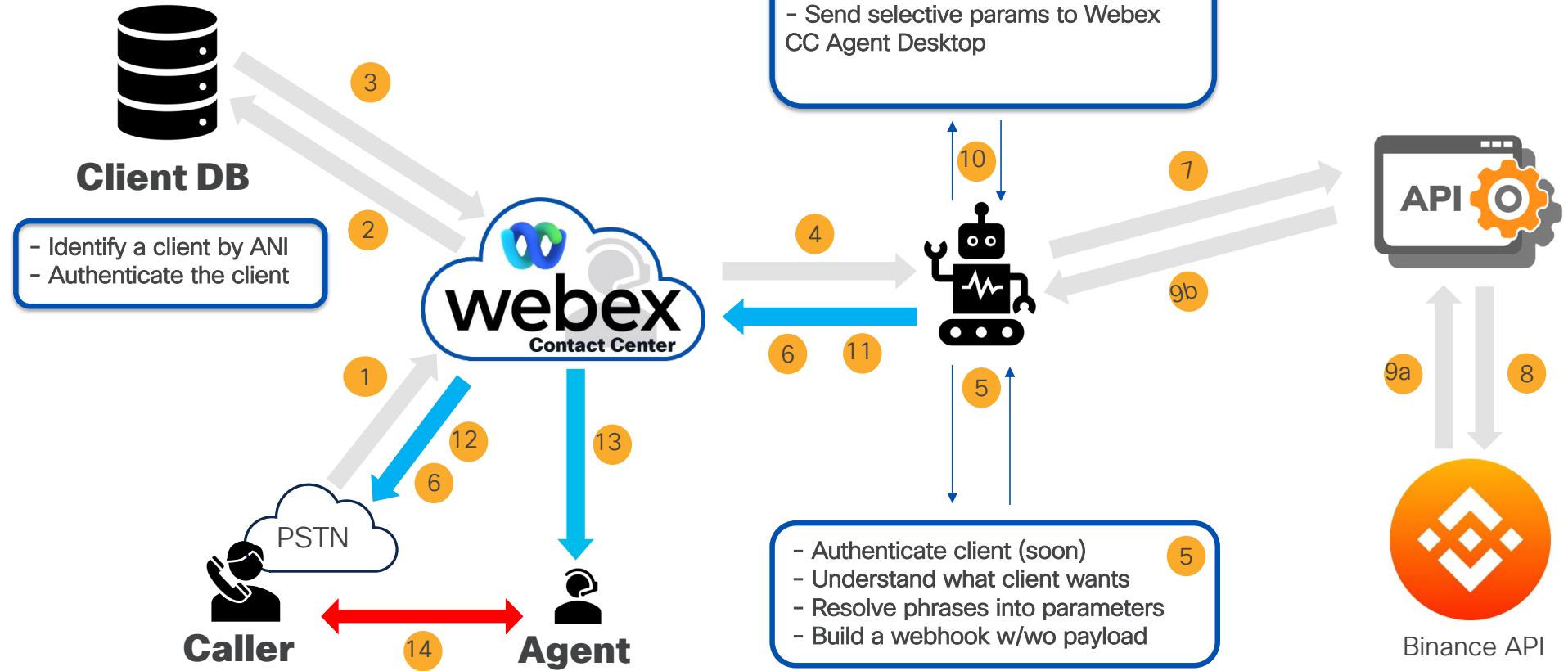
Configuration Flow – DialogFlow ES



Imagine this...



USE CASE – CCAI



USE CASE – CCAI

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Dashboard - Binance

binance.com/en/my/dashboard

BINANCE Buy Crypto Markets Trade **Futures** Earn Square More

YarekB
User ID 80 VIP Level Regular User User Type Personal Following 0 Followers 0

Estimated Balance 0.00151162 BTC = \$60.58 Today's PnL - \$1.01(1.65%)

Deposit **Withdraw** **Cash In**

Markets More >

Holding	Hot	New Listing	Favorite	Top Gainers	24h Volume
USDT	21.57032743	\$ 1	+0.59%	--	Trade
XRP	35.00	\$ 0.5112	-0.60%	- \$0.01	Trade
SHIB	1,546,789.00	\$ 0.0000089	-1.00%	+ \$0.03	Trade
DOGE	95.00	\$ 0.07803	-2.34%	+ \$0.00	Trade

How we did it?



Configuration Pieces

1. Create Google Project
2. Create DialogFlow CX Agent and Conversation profile
3. Create a client database
4. Set up Connector and Virtual Agent
5. Write a JavaScript code (middleware)
6. Create Bot logic
 - Fulfilments, Entities, Intents and Webhooks
 - Parse incoming metadata into parameters
 - Handoff the data to Webex CC
7. Create a flow in Webex CC
 - Parse metadata into flow/global variables