

# Webex for Developers Webinar: Journey Data Service (JDS)

Rue Green – Sr. Solutions Engineer / Full Stack Developer

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# webex for Developers

News and Updates – August 2024



Leveraging the Webex Contact Center Agent Desktop SDK in Your Custom Widgets



Rapidly Adapt Your CX Workflows With Webex Contact Center Flow Designer



Build your First Webex Connect Flow: A Step-by-Step Guide

[developer.webex.com/blog](https://developer.webex.com/blog)

# Webex Journey Data Services Webinar

Rue Green

Sr. Solutions Engineer / Full Stack Developer

# About the Presenter – Rue Green

- Sr. Solutions Engineer, Full Stack Software Developer
- Dual CCIE #9269
  - (Enterprise , Collaboration, DevNet Expert (Pursuing Lab))
- Author of Unified CVP Cisco Press book (2011)
- 18 years CC Experience
  - WxCC, WxCCE, CPaaS
- 28+ years in software development
  - Certified Full Stack Developer (MERN, MEAN)
- 18 years in Cisco
- Professional Beach Volleyball Player and Coach



# Agenda

Problem Statement

Overview

Journey Data Service

JDS Widget

Use Case Deep Dive

# Problem statement

# Power of personalization

71%

consumers expect companies to deliver personalized interactions

76%

consumers get upset when that doesn't happen

# Disconnect between business and customers

80%

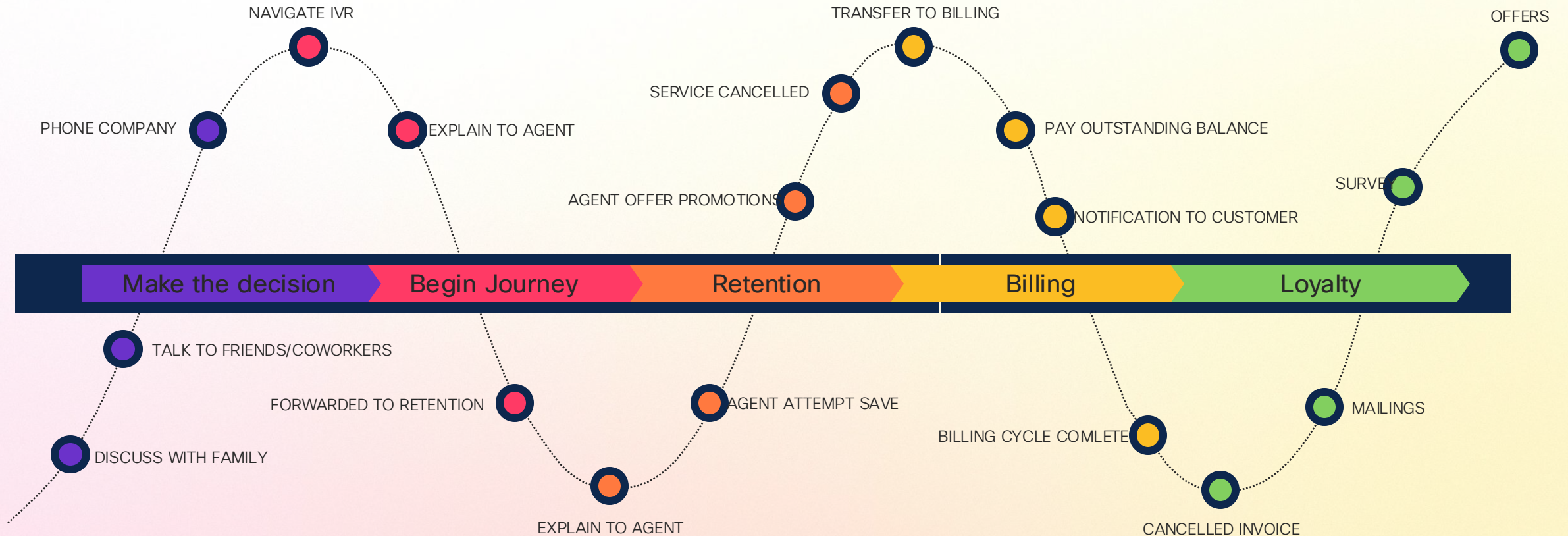
of businesses believe they  
deliver a superior  
experience

8%

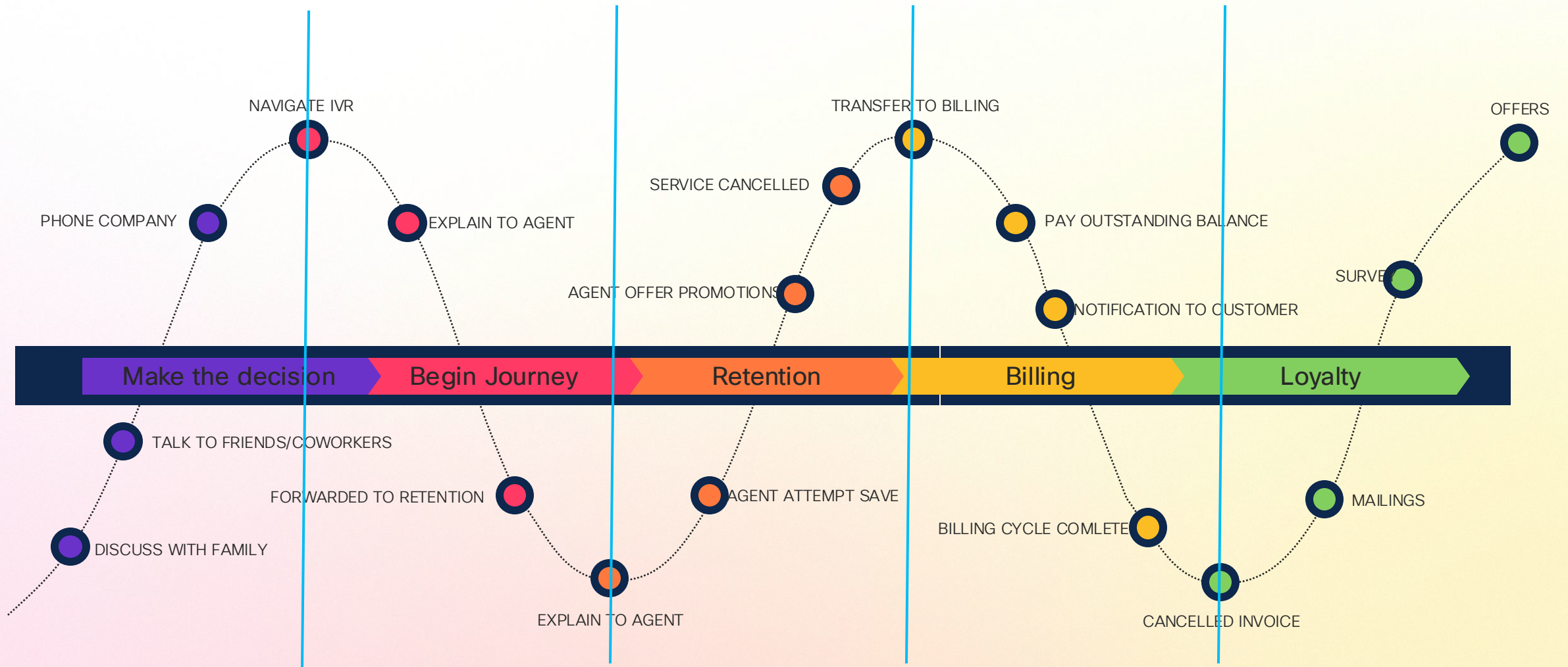
of their customers  
agreed



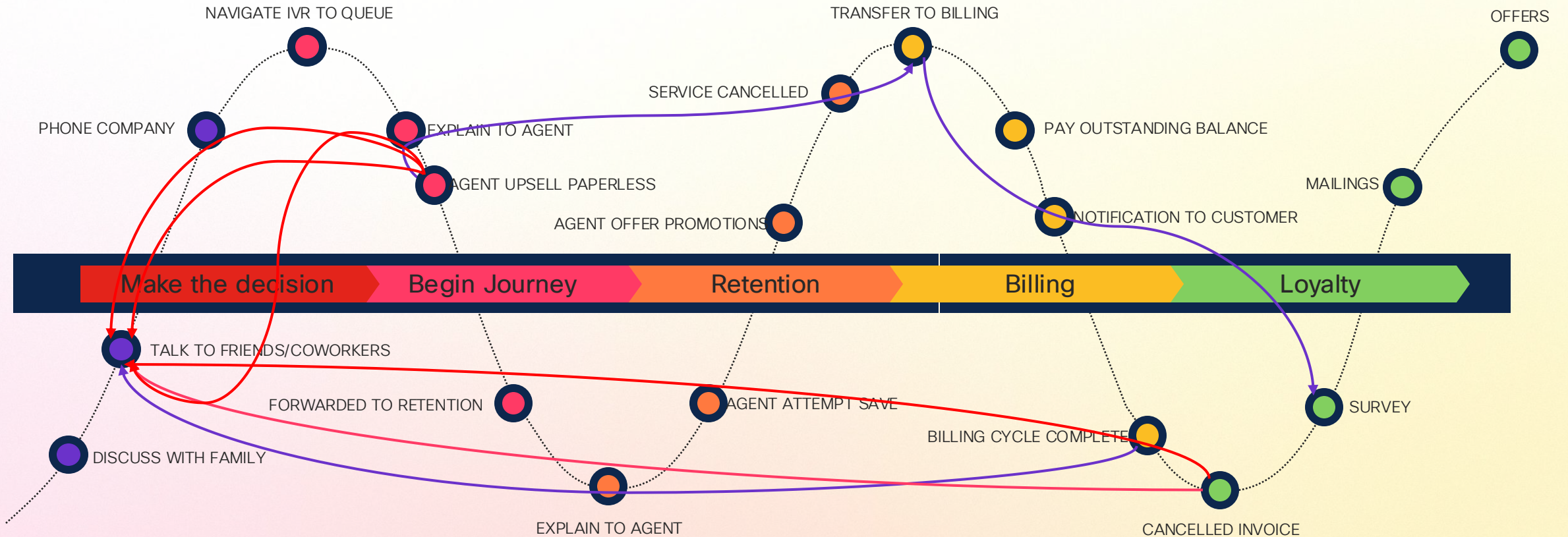
# Inside the disconnect: Cancelling Service



# Inside the disconnect: Cancelling Service



# What actually happens: Cancelling Service



# Disconnect between business and customers

80%

of businesses believe they  
deliver a superior  
experience

8%

of their customers  
agreed

# Overview

# CX Challenges for Evolving Customer Expectation



# Customer journey lifecycle for customer experience leaders

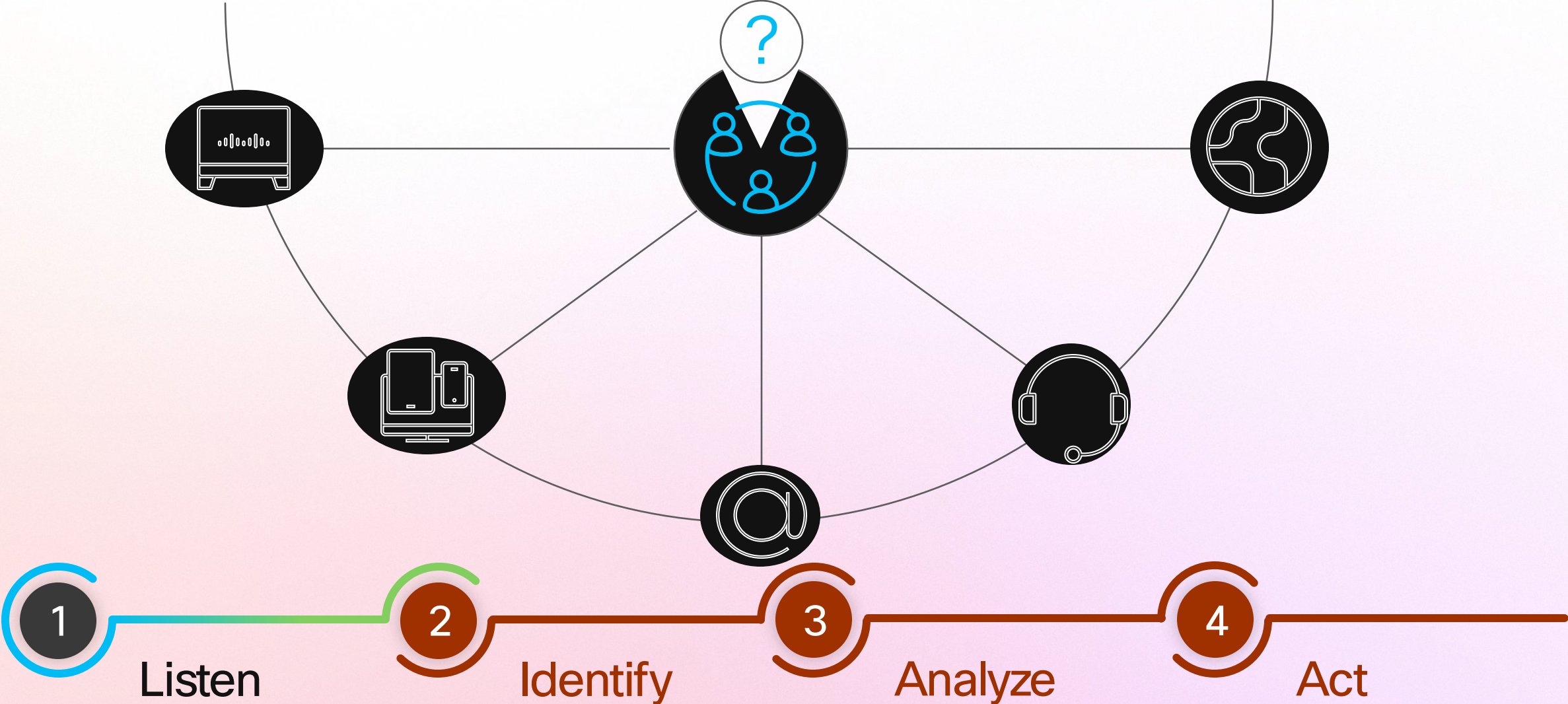


- Automated and Manual events
- Channel agnostic
- Multiple business systems and touchpoints

- Identify and match identifiers
- Apply customer profile and preferences

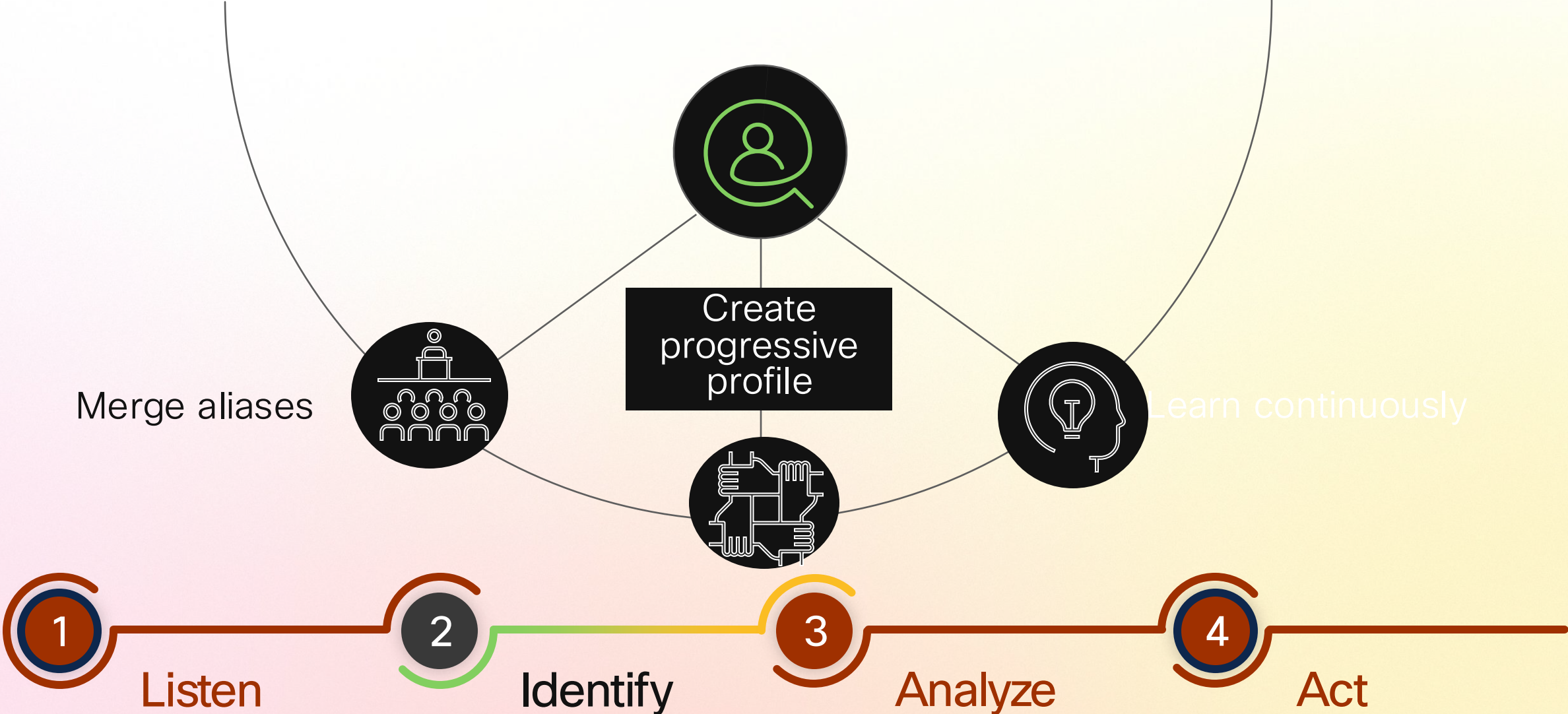
- Next best action
- Proactive communications
- Update business systems
- Provide full context to agents

# Listen: real-time journey tracking

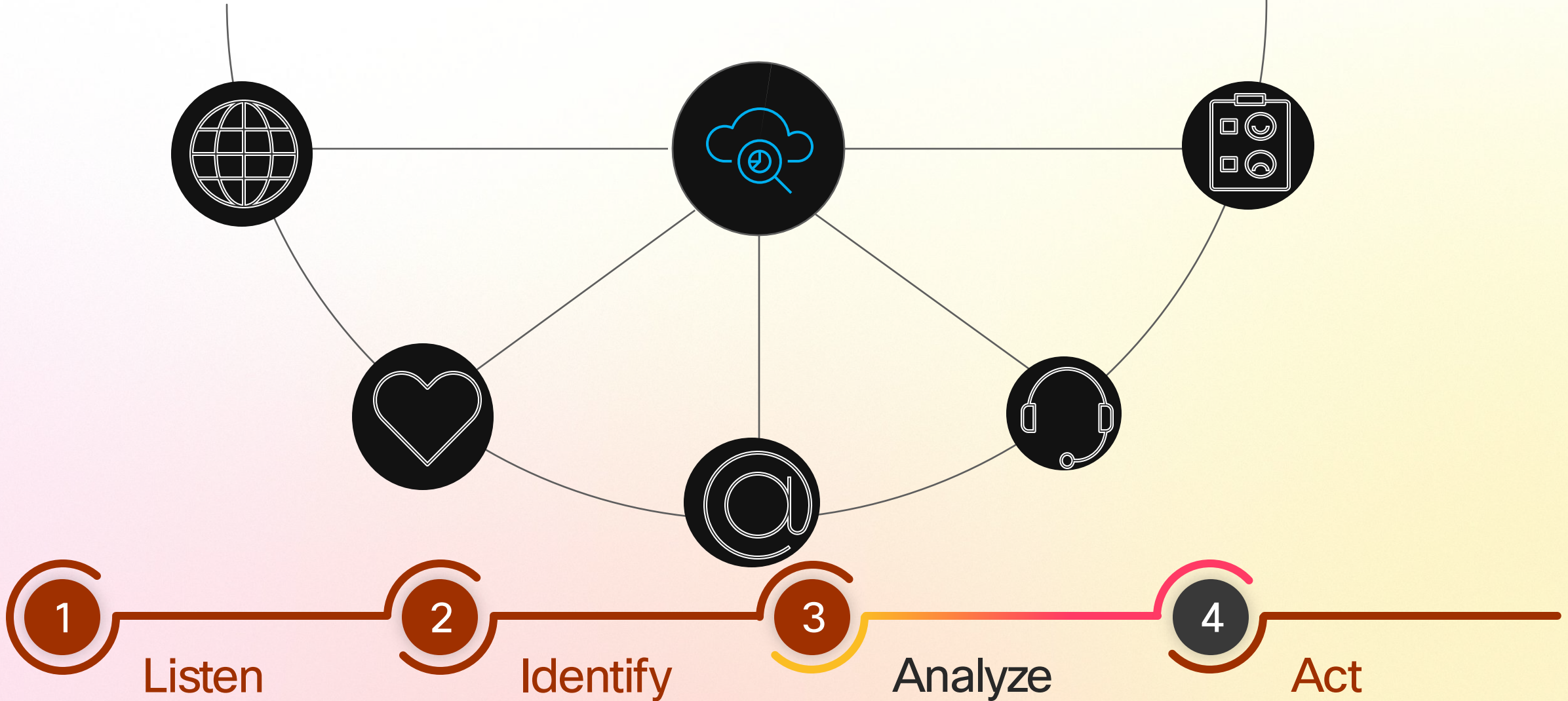




# Identify: dynamic profiling

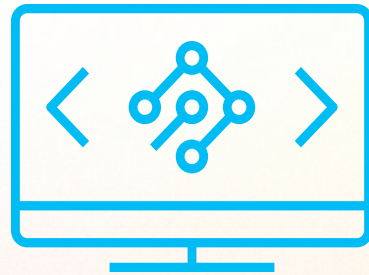


# Analyze: advanced analytics



# Act: powerful orchestration

Real-time activities



Trigger action

Offer

Webex App video connect



Human agent



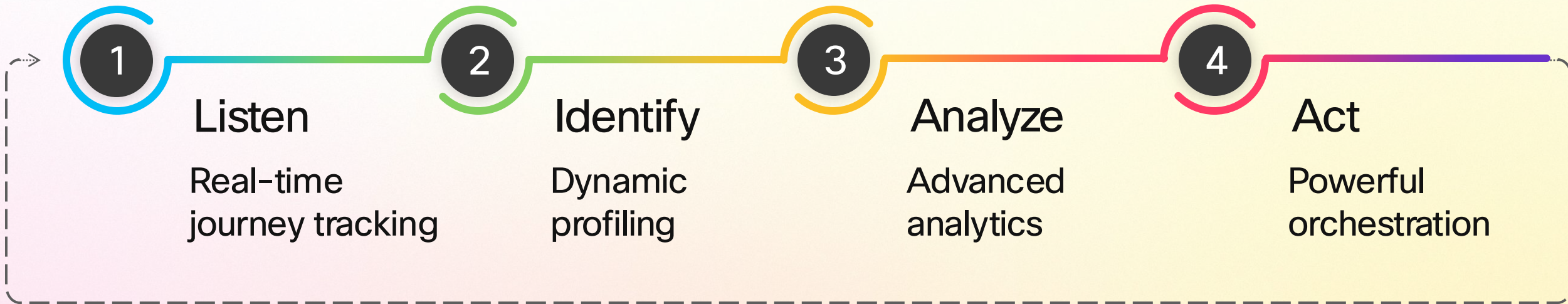
AI assistance



Offer / Voice of Customer



# Customer journey lifecycle for customer experience leaders



# Overall Portfolio

## Business systems



## Customer experience applications

Notifications

Webex  
Notify

Contact Center

Webex  
Contact Center

Collaboration

Webex  
App

Experience management

Webex Experience  
Management

Marketing

Webex  
Campaign

## Communications Platform as a Service (Webex Connect)

Orchestration  
APIs

AI  
APIs

Video  
APIs

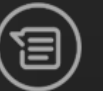
Voice  
APIs

Data  
APIs

Digital channel  
APIs

## Journey data service

## Customer communication channels



# Where CJDS is rolled out?



# Journey Data Service

# JOP

Journey Orchestration Platform

Personalize experiences across multiple touchpoints.

Real-time insights for understanding customer behavior.

Deliver consistent interactions across various channels.

Make data-driven decisions for next-best-action.

Optimize journeys through testing and continuous improvement

# CRM

Customer Relationship Management

Manage customer data for efficient organization.

Streamline sales and marketing processes for effectiveness.

Improve customer service and support experiences.

Track and manage sales pipeline for growth.

Generate insights and make informed decisions.



# How do I get JDS?

- Requires WxCC
  - CCE – (targeting pilot CY24 after v15 release)
- Requires Flex-3 WxCC agent licenses
- Once JDS service available => appears in Control Hub
- Use it or not, your choice
- Existing customers : Will be enabled by end of October 2024, but you can manually request it now for production use

BRKCOE-2100

# Control Hub Configuration

The screenshot displays the Webex Control Hub interface. At the top left, the logo "webex Control Hub" is visible. A search bar is located at the top right. The left sidebar contains a navigation menu with categories: Overview, Alerts center, MONITORING (Analytics, Troubleshooting, Reports), MANAGEMENT (Users, Groups, Locations, Workspaces, Devices, Apps, Account, Organization Settings), and SERVICES (Updates & Migrations). The "Customer Journey D..." link in the MONITORING section is highlighted with a red box. A blue callout box with the text "Click here to check what's in there" points to this link. The main content area shows the "Overview" page with a heading "Here's how to get the m...". Below this, there are sections for "Meetings experience" and "Provide a powerful meeting experience". A key metric is "Total engaged users" for the last 30 days, showing a value of 5 with a 17% decrease. Other metrics include "Dormant users" with a 25% increase. Two goal bars are shown: "Promote human connection through video collaboration" and "Upgrade meeting experiences with Messaging". The bottom of the page features a "Setup guide" section with "Start using Webex", an "Updates" section with a "Learn more" link, and a "New offers" section with a "Webex Webinar 5,000" offer and a "Free trial" button.

<https://admin.webex.com>

# Configuration Project ID

**Customer Journey Data**

Introducing Customer Journey Data

The new Customer Journey Data Service empowers organizations to deliver the right experiences across every channel. Start a journey project to track user activities across any channel. You'll trigger the next best action by leveraging APIs. For more information on journey APIs, go to our [developer portal site](#).

4 Journey projects

Project ID	Project name	Description	
6501bc14c618a0228c58566c	rtms_WxCC	Default JDS Project for RTMS WxCC tenant	
6516e547907a2248f30eaff4	WxCC_NoEvents	This project will not receive any automatic events.	
65aaf8df9924a116f3679615	hoesser	hoesser JDS	
65c50e4788dd5b75fa9d4f31	WxCCE	BRKCCT-2100 used for WxCCE Environment	

Create a Journey Project

You can create as many projects as you want but only one at a time can receive auto feed from WxCC

Copy paste the Project ID on your notes, you will need this ID in your widget

# Auto Events Enablement

The screenshot displays the Webex Control Hub interface. The top navigation bar includes the 'webex Control Hub' logo, a search bar, and user profile information. The left sidebar contains navigation options: Overview, Alerts center, MONITORING (Analytics, Troubleshooting, Reports), and MANAGEMENT (Users). The main content area is titled 'Journey Projects' and shows a project named 'rtms\_WxCC' with a Project ID of '6501bc14c618a0228c58566c' and the description 'Default JDS Project for RTMS WxCC tenant'. Below this, there are tabs for 'Connectors' and 'Identities'. Under the 'Connectors' tab, a 'Webex Contact Center' connector is listed. At the bottom right of this connector entry, there is a toggle switch labeled 'Deactivate Connector' which is currently turned on.

The connector is the ability for WxCC to send all events to JDS through the use of subscriptions.

# Getting Started

- To get started with JDS

<https://developer.webex-cx.com/documentation/guides/journey---getting-started>

- This will give you a link to a smartsheet you need to fill (Until end of Oct 2024)  
<https://app.smartsheet.com/b/form/7776df72239e47d0bbb73a392e32927f>
- Location of the latest desktop widget  
<https://github.com/CiscoDevNet/cjaas-widgets/tree/main/CustomerJourney>
- Authentication for JDS API's  
<https://app.vidcast.io/share/861a3320-669c-4edb-b284-3c1300130583>
- Event Schemas  
<https://developer.webex-cx.com/documentation/journey>

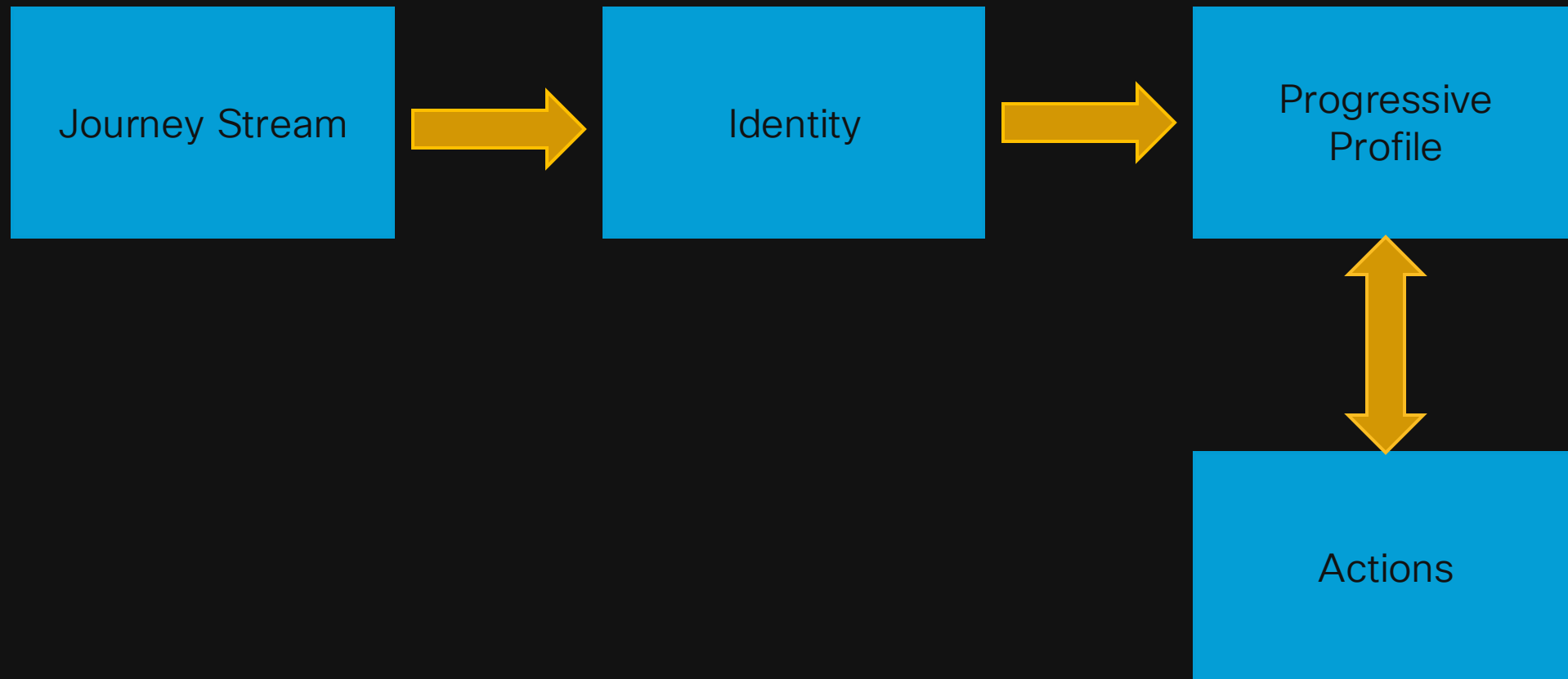
# API-First

Cisco Advances API-First Strategy to Empower  
Developers in the Digital Economy

Sample Files:

<https://github.com/CiscoDevNet/webex-contact-center-api-samples/tree/main/customer-journey-samples>

# Journey Data Services



# Identity and Event Feed

First: Rue

Last: Green

Phone: 111-222-3333  
226-376-2555

JDS chronologically links records together based on identity aliases

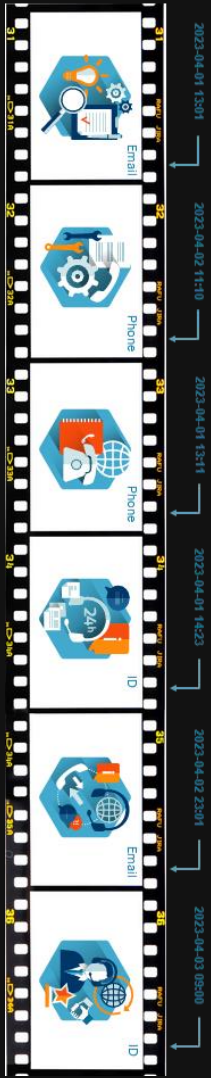
Email: ruegreen@cisco.com  
rue@myhome.com

CustomerID: 2266445





# Identity and Event Feed



- Chronological journey
- Customizable data fields
- Clickable URL's
- Custom Icons and Colors
- Insert events from any platform

Journey

All Last 24 Hours Last 7 Days Last 30 Days

Livestream

4/1/2023

- covid instructions 4/1/2023 10:47 PM  
Information
- SendNotes 4/1/2023 10:47 PM  
Notes
- +1 (516) 517-9309 4/1/2023 10:46 PM  
2 events
- Voice 4/1/2023 10:46 PM  
Callback
  - phone 18505598991
  - agent Agent1 Demo
  - origin Voice
  - channelType Callback
  - channelBreakout SMS
- OTP 4/1/2023 10:43 PM  
OTP-pass
- youtube about us 4/1/2023 10:43 PM  
Information
  - phone 18505598991
  - agent Agent1 Demo
  - url <https://www.youtube.com/watch?v=XVc9Lr7cwCc>
  - origin youtube about us
  - channelType Information
  - channelBreakout SMS

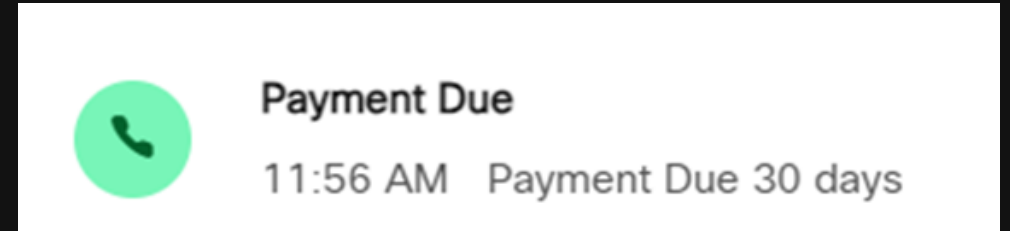
# POST Event Explained

HEADER: Content-Type	application/json
Authorization	Bearer {{Token}}
{	
"id": "xxxx-xxxx-xxxx-xxxx",	Unique UUID
"time": "",	Timestamp ISO 8601 format 2023-03-31T00:39:46.917Z
"specversion": "1.0",	Version number
"type": "Payment",	Free form text
"source": "WxCC%20Desktop",	URI-reference (no spaces allowed must use hex %20)
"identity": "12263762555",	Number used to identify stream (phone, email, customerId, UUID)
"previousidentity": "",	Link journey records when no known identity
"identitytype": "phone",	Categorize identity (phone, email, customerId, temporaryId)
"datacontenttype": "application/json",	
"data": {	
"taskid": "",	Can be added to auto collapse multi-widgets
"transcript": "XXXXX\Nzzzz\n",	Modal Text window displayed
"channelBreakout": "SMS"	Any additional Fields you want to add
"customerSentiment "	neutral, positive, negative
"uiData": {	
"title": "Payment Due",	Title of the entry
"iconType": "telephony",	Icon Name
"subTitle": "Payment Due 30 days"	Subtitle
"hidden": "description",	Lets you hide the entry from the desktop
"division": "BPO 1",	High level filter
"filterTags": ["Payment", "Mortgage"]	Array of filter tags for agent dropdown
}	
}	
}	

## POST Event Explained

```
HEADER: Content-Type      application/json
        Authorization     Bearer {{Token}}

{
  "id": "xxxx-xxxx-xxxx-xxxx",
  "specversion": "1.0",
  "type": "Payment",
  "source": "WxCC%20Desktop",
  "identity": "12263762555",
  "identitytype": "phone",
  "datacontenttype": "application/json",
  "data": {
    "uiData": {
      "title": "Payment Due",
      "iconType": "telephony",
      "subTitle": "Payment Due 30 days"
    }
  }
}
```



# POST Event Explained

HEADER: Content-Type	application/json
Authorization	Bearer {{Token}}
{	
"id": "xxxx-xxxx-xxxx-xxxx",	Unique UUID
"time": "",	Timestamp ISO 8601 format 2023-03-31T00:39:46.917Z
"specversion": "1.0",	Version number
"type": "Payment",	Free form text
"source": "WxCC%20Desktop",	URI-reference (no spaces allowed must use hex %20)
"identity": "12263762555",	Number used to identify stream (phone, email, customerId, UUID)
<pre>“previousidentity”:</pre>	Link journey records when no known identity
"identitytype": "phone",	Categorize identity (phone, email, customerId, temporaryId)
"datacontenttype": "application/json",	
"data": {	
"taskid": "",	Can be added to auto collapse multi-widgets
"transcript": "XXXXX\Nzzzz\n",	Modal Text window displayed
"channelBreakout": "SMS"	Any additional Fields you want to add
"customerSentiment "	neutral, positive, negative
"uiData": {	
"title": "Payment Due",	Title of the entry
"iconType": "telephony",	Icon Name
"subTitle": "Payment Due 30 days"	Subtitle
<pre>“hidden”:</pre>	Lets you hide the entry from the desktop
<pre>“division”:</pre>	High level filter
<pre>“filterTags”:[“Payment“,”Mortgage”]</pre>	Array of filter tags for agent dropdown
}	
}	
}	

## POST Event Explained

<pre>{</pre>	
<pre>  "time": "",</pre>	Timestamp ISO 8601
<pre>  "previousidentity": "",</pre>	Link journey records when no known identity
<pre>  "data": {</pre>	
<pre>    "taskid": "",</pre>	Can be added to auto collapse multi-widgets
<pre>    "transcript": "XXXXX\Nzzzz\n",</pre>	Modal Text window displayed
<pre>    "channelBreakout": "SMS"</pre>	Any additional Fields you want to add
<pre>    "customerSentiment"</pre>	neutral, positive, negative
<pre>    "uiData": {</pre>	
<pre>      "hidden": "description",</pre>	Lets you hide the entry from the desktop
<pre>      "division": "BPO 1",</pre>	High level filter
<pre>      "filterTags": ["Payment", "Mortgage"]</pre>	Array of filter tags for agent dropdown
<pre>    }</pre>	
<pre>  }</pre>	
<pre>}</pre>	

# Use Case: temporaryId Events

# temporaryId Events - Home

The screenshot displays a web application interface. The main content area features a large background image of a power transmission tower against a blue sky with clouds. At the top left, there is a navigation menu with links for Home, About, Contact, and Login. A vertical button labeled "Talk to an Expert" is positioned on the right side of the main image. In the bottom right corner of the main image, there is a circular chat icon.

On the right side of the interface, there is a "Customer Journey Widget". At the top of this widget, there are icons for a menu, a phone, a bell, and a status indicator labeled "Engaged". Below these icons, the widget displays the following information:

- Customer ID: 4689557617731186
- Customer ID: 18505598991

The "Journey" section includes a filter menu with options: All, Last 24 Hours, Last 7 Days, and Last 30 Days. A "Livestream" toggle is currently turned on. A date filter is set to "5/22/2023". The journey events are listed as follows:

Event	Date	Time
SendNotes Notes	5/22/2023	4:57 PM
OTP OTP-pass	5/22/2023	4:56 PM
product info Information	5/22/2023	4:56 PM
youtube about us Information	5/22/2023	4:56 PM
Test 5 - My title Test 5	5/22/2023	4:56 PM

# temporaryId Events - About

The screenshot displays a web application interface. The top navigation bar includes links for Home, About, Contact, and Login. The main content area features a large image of a solar farm with several workers in safety gear. A blue chat bubble icon labeled "Talk to an Expert" is positioned on the right side of the image. On the right side of the interface, there is a "Customer Journey Widget" with the following details:

- Customer ID: 4689557617731186
- Customer ID: 18505598991

The "Journey" section includes filters for "All", "Last 24 Hours", "Last 7 Days", and "Last 30 Days". A "Livestream" toggle is currently turned on. The date "5/22/2023" is displayed. The journey events are as follows:

Event	Time
SendNotes Notes	5/22/2023 4:57 PM
OTP OTP-pass	5/22/2023 4:56 PM
product info Information	5/22/2023 4:56 PM
youtube about us Information	5/22/2023 4:56 PM
Test 5 - My title Test 5	5/22/2023 4:56 PM



# temporaryId Events - Contact

The screenshot displays a web application interface. On the left, a navigation bar includes links for Home, About, Contact, and Login. The main content area features a large image of hands holding a chalkboard with the text "CONTACT US" written on it. A blue button labeled "Talk to an Expert" is positioned on the right side of the image. On the right side of the interface, a "Customer Journey Widget" is visible, showing customer details and a list of events.

Navigation: Home About Contact Login

Customer Journey Widget

Customer ID: 4689557617731186  
Customer ID: 18505598991

Journey

Filters: All Last 24 Hours Last 7 Days Last 30 Days

Options: Livestream

Date: 5/22/2023

Events:

- SendNotes (Notes) - 5/22/2023 4:57 PM
- OTP (OTP-pass) - 5/22/2023 4:56 PM
- product info (Information) - 5/22/2023 4:56 PM
- youtube about us (Information) - 5/22/2023 4:56 PM
- Test 5 - My title (Test 5) - 5/22/2023 4:56 PM

# temporaryId Events – SMS Expert

**Text message with an expert**  
Less than 2 minute wait time

Name  
Enter your full name

Mobile Numb Barry McLellan  
Enter your mobile number

Pick your language  
English

Close Send

**Need Help?**

Expert Advisor  
We're here to help

**Call Us - 8 min wait time**  
Talk with an expert now

**WhatsApp - 2 minute wait time**  
WhatsApp message with an expert

**Callback - 8 minute wait time**  
Don't wait in queue, we will call you

**Email an Expert - 12-24 hour wait time**  
An expert will respond to your email

**SMS an Expert - 2 minute wait time**  
Text message with an expert

Talk to an Expert

**Customer Journey Widget**

Customer ID 4689557617731186  
Customer ID 18505598991

**Journey**

All Last 24 Hours Last 7 Days Last 30 Days

Livestream

5/22/2023

SendNotes	Notes	5/22/2023 4:57 PM
OTP	OTP-pass	5/22/2023 4:56 PM
product info	Information	5/22/2023 4:56 PM
youtube about us	Information	5/22/2023 4:56 PM
Test 5 - My title	Test 5	5/22/2023 4:56 PM

# temporaryId Events - Login

The screenshot displays a web application interface. On the left, a navigation menu includes 'Home', 'About', 'Contact', and 'Login'. A 'Login' modal is open, featuring input fields for 'Email' (with placeholder 'Enter your email') and 'Password' (with placeholder 'Enter your password'), and a 'Login' button. The background image shows hands holding a chalkboard with 'US' written on it. On the right, a 'Customer Journey Widget' is visible, showing customer IDs and a list of events for the date 5/22/2023. A 'Talk to an Expert' button is located on the right side of the page.

Home About Contact Login

**Login** [X]

Email  
Enter your email

Password  
Enter your password

Login

Customer Journey Widget

Customer ID 4689557617731186  
Customer ID 18505598991

Journey [^]

All Last 24 Hours Last 7 Days Last 30 Days

Livestream [ON]

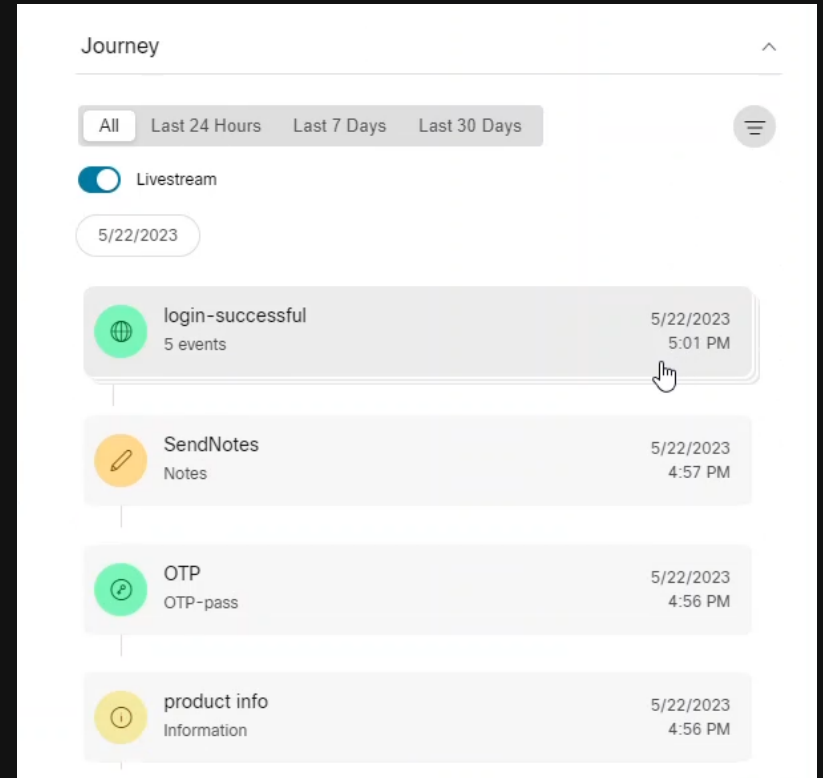
5/22/2023

- SendNotes Notes 5/22/2023 4:57 PM
- OTP OTP-pass 5/22/2023 4:56 PM
- product info Information 5/22/2023 4:56 PM
- youtube about us Information 5/22/2023 4:56 PM
- Test 5 - My title Test 5 5/22/2023 4:56 PM

Talk to an Expert

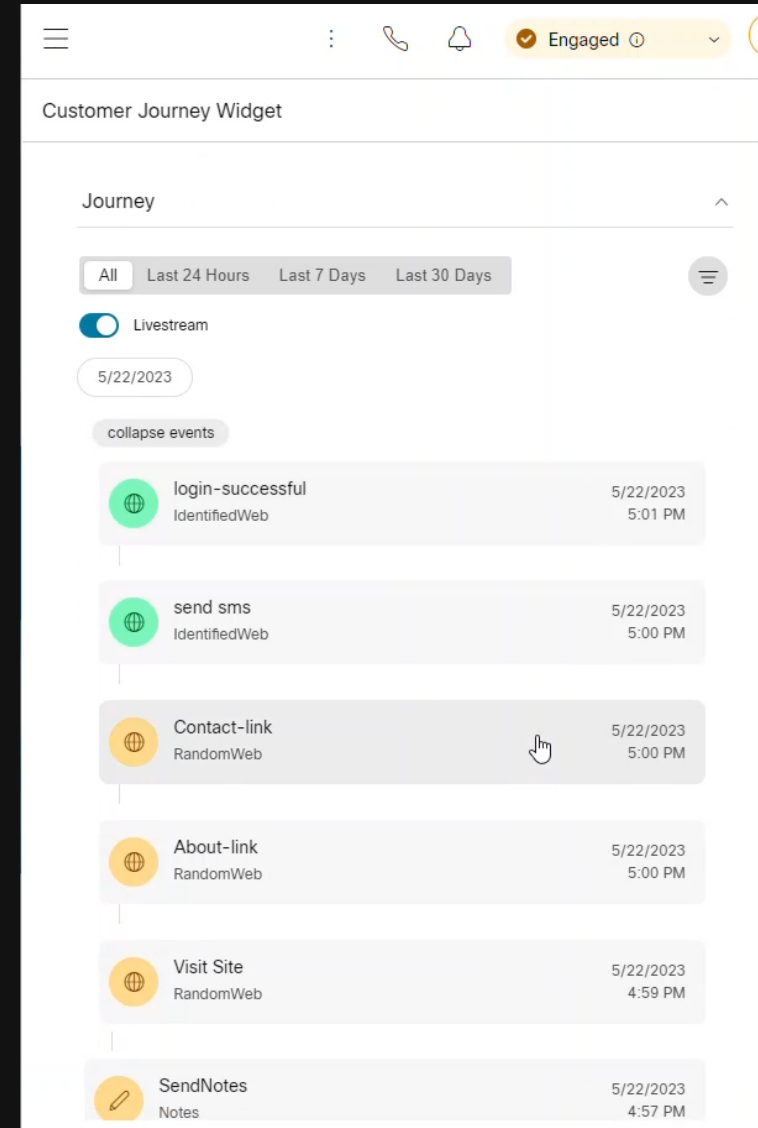
# temporaryId Events – Collapsible Journey

- All web events tracked as one collapsible entry
- Color coded icon to denote last web selection



# temporaryId Events – Site Interactions

- Expanded events show 5 clicks to website locations
- Yellow denotes unidentified website user
- Use chose SMS channel and we were able to tie back SMS number with user profile
- login-successful with already identified user



# temporaryId Events – Expanded Event

- Website information sent to event
- Include identity type of identified user

The screenshot displays a 'Customer Journey Widget' interface. At the top, there is a navigation bar with a menu icon, a status indicator 'Engaged', and a dropdown arrow. Below the header, a 'collapse events' button is visible. The main content area shows a list of events:

- login-successful** (IdentifiedWeb) on 5/22/2023 at 5:01 PM.
- send sms** (IdentifiedWeb) on 5/22/2023 at 5:00 PM. This event is expanded to show the following details:
  - taskId: f3876f11-0c5b-47cf-9636-0ababc648417
  - identitytype: 18505598991
  - appName: Netscape
  - appVersion: 5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36
  - userAgent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/113.0.0.0 Safari/537.36
  - platform: Win32
  - origin: send sms
  - url: <https://demowebsite-10871.web.app/#>
  - channelType: IdentifiedWeb
  - channelBreakout: web
- Contact-link** (RandomWeb) on 5/22/2023 at 5:00 PM.
- About-link** (RandomWeb) on 5/22/2023 at 5:00 PM.
- Visit Site** (RandomWeb) on 5/22/2023 at 4:59 PM.

# temporaryId Events to track unknown users

## Website Visit

```
{  "id": "{{ $guid }}",
  "specversion": "1.0",
  "type": "webvisit",
  "source": "home.com:website",
  "identity": "954fcd6c-d-047ddb909",
  "identitytype": "temporaryId",
  "datacontenttype": "application/json",
  "data": {
    "notes": "Website Visit",
    "origin": "Website",
    "channelType": "NewVisit",
    "channelBreakout": "Web"  }
}
```

Need to keep track of identity  
New type: identitytype as  
temporaryId

## Website Review Mortgage Rates

```
{  "id": "{{ $guid }}",
  "specversion": "1.0",
  "type": "webvisitMortgage",
  "source": "home.com:web:mortgage",
  "identity": "954fcd6c-d-047ddb909",
  "identitytype": "temporaryId",
  "datacontenttype": "application/json",
  "data": {
    "notes": "Website Mortgage Rates",
    "origin": "Mortgage Rates",
    "channelType": "MortgageRates",
    "channelBreakout": "Web"  }
}
```

Need to keep track of identity  
New type: identitytype as  
temporaryId

## Log into Website

```
{  "id": "{{ $guid }}",
  "specversion": "1.0",
  "type": "webvisitLogin",
  "source": "home.com:login",
  "previousidentity": "954fcd6c-dd047ddb909",
  "identity": "ruegreen@cisco.com",
  "identitytype": "email",
  "datacontenttype": "application/json",
  "data": {
    "notes": "Website Login",
    "origin": "Website Login",
    "channelType": "LoginUser",
    "channelBreakout": "Web"  }
}
```

Once use is recognized next post  
must contain the previous key  
(identity) which will link the 2  
previous journeys

# Use Case: Filtering, Progressive Profiles and Actions



# Event Feed Filtering to alter flow

[https://api-jds.prod-useast1.ciscowxdap.com/v1/api/events/workspace-id/XXXXX?identity=\(URI Encoded\) &filter=type=='Payment'&data=category=='Water'&pageSize=1](https://api-jds.prod-useast1.ciscowxdap.com/v1/api/events/workspace-id/XXXXX?identity=(URI%20Encoded)&filter=type=='Payment'&data=category=='Water'&pageSize=1)

- Return last record based on identity  
.../events/workspace-id/{{id}}?identity={{id}}&pageSize=1
- Filter based on Source in the URL  
.../events/workspace-id/{{id}}?filter=type=='Payment'
- Filter based on Data in the URL  
.../events/workspace-id/{{id}}?data=category=='Water'
- Combine Filters  
.../workspace-id/{{id}}?filter=type=='Payment'&data=category=='Water'

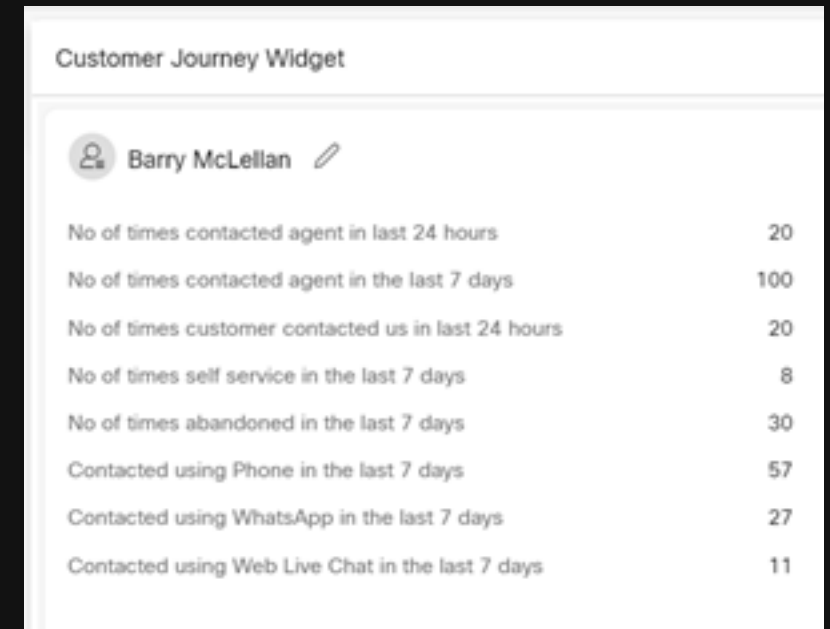
```
{ "id": "{{guid}}",  
  "specversion": "1.0",  
  "type": "Payment",  
  "source": "SMS%20Notifcation",  
  "identity": "+13033249089",  
  "identitytype": "phone",  
  "datacontenttype": "application/json",  
  "data": {  
    "phone": "+13033249089",  
    "Reason": "Late Payment Notification Sent",  
    "category": "Water",  
    "status": "overdue",  
    "origin": "Past Due - 1st Notification",  
    "channelType": "Payment Notify",  
    "channelBreakout": "sms"  
  }  
}
```

# Progressive Profile



- Progressive Profiles accumulate customer interaction data over time, influencing conditional routing.
  - Tracks events against Identity/Alias
  - Enables conditional routing based on interaction history

- Examples:

- How many times have they called into our queues today?
- Has the customer ever used email before?
- Has the customer tried out our voice bots before?
- Have we sent them a campaign SMS in the last 5 days?



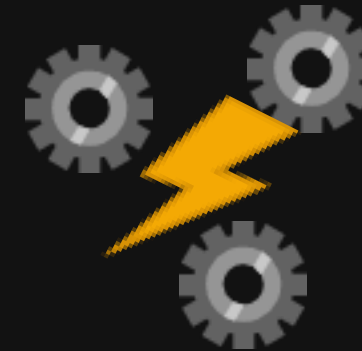
Customer Journey Widget

 Barry McLellan 

No of times contacted agent in last 24 hours	20
No of times contacted agent in the last 7 days	100
No of times customer contacted us in last 24 hours	20
No of times self service in the last 7 days	8
No of times abandoned in the last 7 days	30
Contacted using Phone in the last 7 days	57
Contacted using WhatsApp in the last 7 days	27
Contacted using Web Live Chat in the last 7 days	11

# Journey Actions

- Journey Actions are automated responses triggered by specific thresholds in a Progressive Profile.
  - Auto-executes rules-based actions.
  - Triggered by Progressive Profile metrics.
- Examples:
  - Received 3 late payment notifications...
  - Called and abandoned 10 times in 1 day...
  - Added 3 items into their shopping cart....



BRK001-2100

# Progressive Profile and Journey Actions

- Supported Data Types
  - string, integer, double, utc\_datetime
- Create aggregations based on conditions
  - Value, Count, Sum, Max, Min, Average, Distinct
- Loop back period
  - days, hours, minutes
- Conditional branch AND / OR Logic
- Logical operators used for decisioning
  - EQ, NEQ, GTE, GT, LTE, LET

# JDS widget

# Coding Language

- Widget uses lit-element JS framework for development
- lit-element is a lightweight library for web components
- Responsive and fast with lit-element
- CSS used for widget's styling and layout
- Widget Source Code:  
<https://github.com/CiscoDevNet/cjaas-widgets>

# Journey Data Services Desktop

### Customer Journey Widget

Barry McLellan

No of times contacted agent in last 24 hours	20
No of times contacted agent in the last 7 days	100
No of times customer contacted us in last 24 hours	20
No of times self service in the last 7 days	8
No of times abandoned in the last 7 days	30
Contacted using Phone in the last 7 days	57
Contacted using WhatsApp in the last 7 days	27
Contacted using Web Live Chat in the last 7 days	11

Filter By All Time Range All Time

Today 3/30/2024

**inbound social sms** 10:21 PM Queue: bmclella\_SMS answered by team bmclella\_Team1

channelBreakout	sms
waited in queue	0
agent	CXbarry Admin
contact	18505598991
destination	bmclella_SMS_12014094189
team	bmclella_Team1

**Digital Transcript** 01:33 PM Agent Customer Transcript Neutral

---

**inbound social sms** 01:33 PM Wrap Up: Pharmacy Appointment

**Digital Transcript** 01:32 PM Agent Customer Transcript Positive

---

**inbound chat web** 01:32 PM Wrap Up: Sales

webex

57

# Journey Data Services Desktop

- Localization
- Chronological journey
- Customizable data fields
- Clickable URL's
- Custom Icons and Colors
- Mark Events Hidden
- Filter by division (BPO)
- Filter tags (dynamic default)
- Support for emoji's
- Insert events from any platform
- Lookup Identity (can be turned off)
- Default on Agent Desktop
- End October 2024

The screenshot displays the 'Customer Journey Widget' interface. At the top, there is a search bar for 'Lookup Identity' with the value '18505598991'. Below this, the customer's name 'Barry McLellan' is shown with an edit icon. A summary section lists contact statistics: 'No of times contacted agent in last 24 hours' (21), 'No of times contacted agent in the last 7 days' (100), and 'No of times customer contacted us in last 24 hours' (20). The interface includes filters for 'Filter By' (set to 'All') and 'Time Range' (set to 'All Time'). The date 'Today 3/30/2024' is displayed. The journey history shows three events: 1) 'inbound social sms' at 10:21 PM with a 'Queue: bmclella\_SMS answered by team b...' and a neutral sentiment icon. 2) 'Digital Transcript' at 01:33 PM with 'Agent Customer Trans...' and a neutral sentiment icon. 3) 'inbound social sms' at 01:33 PM with 'Wrap Up: Pharmacy Appointment' and a positive sentiment icon. A 'Digital Transcript' event is partially visible at the bottom with a positive sentiment icon.



# Journey Data Services Desktop

## Full View

Customer Journey Widget

**Customer Information**

Barry McLellan

No of times contacted agent in last 24 hours: 21

No of times contacted agent in the last 7 days: 100

No of times customer contacted us in last 24 hours: 20

**Activities** Livestream

Most Recent

Mar 30 10:21 PM Queue: bmclella\_SMS answered by team b...

Filter By: All Time Range: All Time

Today 3/30/2024

Inbound social sms 10:21 PM Queue: bmclella\_SMS answered by team ...

Digital Transcript 01:33 PM Agent Customer Tran... Neutral

## Condensed View

Customer Journey Widget

Barry McLellan

No of times contacted agent in last 24 hours: 20

No of times contacted agent in the last 7 days: 100

No of times customer contacted us in last 24 hours: 20

Filter By: All Time Range: All Time

**Inquiries on products**  
01:31 PM Customer reviewed: insurance

**Inquiries on products**  
01:30 PM Customer reviewed: mortgages

**Chat Loaded from URL**  
01:30 PM Customer Start LiveChat

channelBreakout	livechat
user select language	English
user option	Self Service
user name	Barry
browser	Mozilla/5.0 (Windows NT 10.0; Win64; x64)

# Journey Data Services Desktop

The screenshot displays the 'Customer Journey Widget' interface. At the top, there is a search bar labeled 'Lookup Identity' with the value '18505598991'. Below the search bar, the profile of 'Barry McLellan' is shown. A summary table provides contact statistics:

No of times contacted agent in last 24 hours	21
No of times contacted agent in the last 7 days	100
No of times customer contacted us in last 24 hours	20

Below the summary, there are filters for 'Filter By' (set to 'All') and 'Time Range' (set to 'All Time'). The date 'Today 3/30/2024' is displayed. The main content area shows a list of interactions:

- inbound social sms** at 10:21 PM. Queue: bmclella\_SMS answered by team b...
- Digital Transcript** at 01:33 PM. Agent Customer Trans... with a **Neutral** sentiment.
- inbound social sms** at 01:33 PM. Wrap Up: Pharmacy Appointment.

- Searchable
  - CustomerID
  - Phone
  - Email
- Search criteria can be variable driven or use default ANI
- Agent searchable or locked down

# Journey Data Services Desktop

The screenshot displays the 'Customer Journey Widget' interface. At the top, there is a search bar labeled 'Lookup Identity' with the value '18505598991'. Below this, the customer's name 'Barry McLellan' is shown with an edit icon. A table of contact statistics is presented:

No of times contacted agent in last 24 hours	21
No of times contacted agent in the last 7 days	100
No of times customer contacted us in last 24 hours	20

Below the statistics, there are filters for 'Filter By' (set to 'All') and 'Time Range' (set to 'All Time'). The date 'Today 3/30/2024' is displayed. A list of interactions follows:

- inbound social sms**: 10:21 PM, Queue: bmclella\_SMS answered by team b...
- Digital Transcript**: 01:33 PM, Agent Customer Trans..., with a 'Neutral' sentiment indicator.
- inbound social sms**: 01:33 PM, Wrap Up: Pharmacy Appointment.

- **Dynamic Profile**

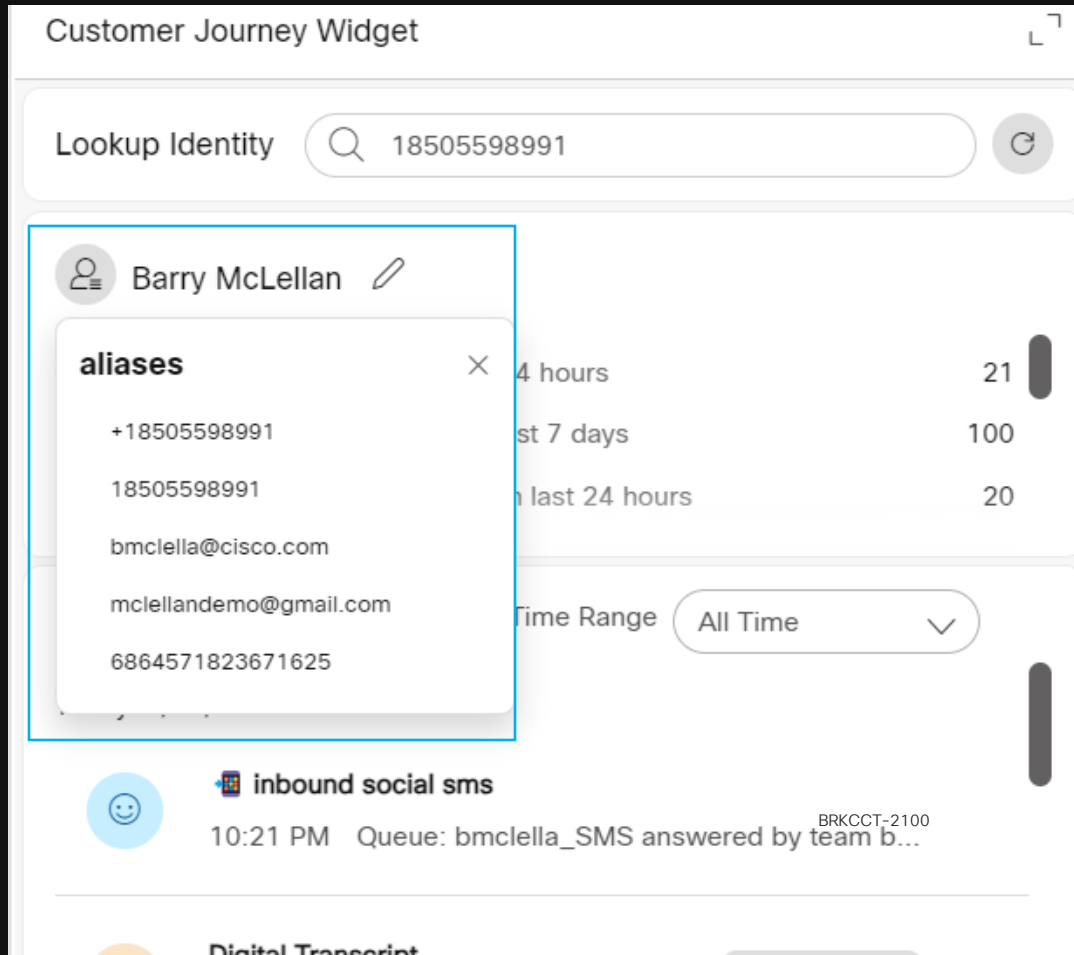
- Frequency may suggest unresolved concerns

- Based on time-period, agents can anticipate potential challenges

- Measure and address customer satisfaction

- Out of the box or create your own

# Journey Data Services Desktop



- Aliases
  - Verify identity by cross-referencing communication channels
  - Connect data from various sources and interactions associated with different names
  - Merge and aggregate data from various sources, channels or systems associated
- Agent editable or locked down

# Custom Icons



- All icons that can be used are located at <https://momentum.design/icons>
  - Click the icon and copy the CSS Class Name. We've found size 16 looks the best.
- Host your icon file on any accessible site.
  - Ensure you are handling any CORS configurations with your cloud provider.
- ChannelType in your event feed must equal the name you give your icon.
- Pick from 17 different colors:  
blue, green, black, olive, cyan, violet, red, gray, orange, lime, cobalt, purple, yellow, gold, mint, slate, pink

```
ChannelType          ->      "Telephony": {  
CSS Class Name ->      "name": "icon-handset-active_16",  
Color                ->      "color": "green"  
                                }
```

Sample file: Sample icon file – icons

<https://github.com/CiscoDevNet/cjaas-widgets/blob/592aab211e332d8af13d4b0c830443e38a50aa09/CustomJourney/src/assets/icons.json>

See video for an example and demonstration

<https://app.vidcast.io/share/b12ce3a4-848a-4312-8d46-67cf59156e53>

# BASIC DESKTOP LAYOUT

```
{ "comp": "md-tab-panel",
  "attributes": {
    "slot": "panel",
    "class": "widget-pane"
  },
  "children": [
    {
      "comp": "customer-journey-widget",
      "script": "https://journey-widget.webex.com",
      "attributes": {
        "show-alias-icon": "true",
        "condensed-view": "true",
        "icon-data-path": "https://wxcc-demo.glitch.me/icons.json"
      },
      "properties": {
        "interactionData": "$STORE.agentContact.taskSelected",
        "bearerToken": "$STORE.auth.accessToken",
        "organizationId": "$STORE.agent.orgId",
        "dataCenter": "$STORE.app.datacenter"
      },
      "wrapper": {
        "title": "Customer Journey Widget",
        "maximizeAreaName": "app-maximize-area"
      }
    }
  ]
}
```

[ciaas-widgets/CustomJourney/src/assets/JDSDesktopLayout10.json at main · CiscoDevNet/ciaas-widgets · GitHub](#)

# Use case deep dive

# Customer scenarios:

1

## Directing Customer Input

Last minute customers who remember it's time to pay a bill, don't need to wait for menus to take them to their options. Sometimes businesses need to take control as soon as the customer calls.

2

## Repeat Customer

Callers repeatedly hitting the queues are most likely very frustrated and in a hurry to talk with an agent.

3

## Saving the Customer

Things happen in call centers. Late callers, close to end of shift and eager to leave agents could leave a caller with no where to go other than to bed, mad!



# Customer Journey Samples

The screenshot shows a GitHub repository page for 'CiscoDevNet/webex-contact-center-api-samples'. The repository is public and has 20 watchers, 17 forks, and 16 stars. The current view is the 'customer-journey-samples' directory. The file browser on the left shows a tree structure with folders like '.github', 'app-auth-sample', 'call-recording-samples', 'callback-samples', 'configuration-samples', 'customer-journey-samples', 'UC1-directing-customer-input', 'UC2-tracking-the-repeat-caller', 'cjds-postman-example', 'manage-identities-and-aliases', 'desktop-sample', 'dialogflow-sample', 'ewt-sample', 'postman-sample', 'reporting-samples', 'token-management-samples', and 'webhook-email-notif-sample'. The commit history table shows a commit by 'arubhatt' with the message 'dialogflow-example' and a commit date of '2 days ago'. The README snippet is titled 'Customer Journey Data Services (CJDS) Samples' and includes a video link 'Video: Overview of Customer Journey Data Services'.

Name	Last commit message	Last commit date
..		
UC1-directing-customer-input	dialogflow-example	2 days ago
UC2-tracking-the-repeat-caller	dialogflow-example	2 days ago
cjds-postman-example	dialogflow-example	2 days ago
manage-identities-and-aliases	dialogflow-example	2 days ago
README.md	readme updates	last week

**Customer Journey Data Services (CJDS) Samples**

This is the main folder for the Customer Journey Data Services API Samples.

[Video: Overview of Customer Journey Data Services](#)

Explore each of the folders below to understand more of each of the samples below:

<https://github.com/CiscoDevNet/webex-contact-center-api-samples/tree/main/customer-journey-samples>

# Use Case 1 – Directing Customer Input

**Directing Customer Input** – Last minute customers who remember it's time to pay a bill don't need to wait for menu's to take them to their options. Sometimes businesses need to take control as soon as the customer calls.

## Postman Examples:

- |                                       |                                                     |
|---------------------------------------|-----------------------------------------------------|
| UC1 – Payment Past Due Notify 1       | - Set up the late payment                           |
| UC1 – Check Payment Past Due Notify 1 | - Query JDS and look for event type and category    |
| UC1 – Payment Past Due Notify 2       | - 2 <sup>nd</sup> payment reminder                  |
| UC1 – Payment Made                    | - Payment made, close JDS loop so no more inquiries |

See video for an example and demonstration

<https://github.com/CiscoDevNet/webex-contact-center-api-samples/tree/main/customer-journey-samples/UC1-directing-customer-input>

# Use Case 2 - Repeat Caller

Call and hang up, call and hang up

## Postman Examples:

- |                                              |                                             |
|----------------------------------------------|---------------------------------------------|
| UC2 - Create Profile Template Repeat Caller  | - Create Progressive Profile                |
| UC2 - Get All Profile View Templates         | - Get profile view                          |
| UC2 - POST Queued Caller Info                | - Used script example, but this is the base |
| UC2 - Progressive Profile View Repeat Caller | - Get the values being accumulated          |

See video for an example and demonstration

<https://github.com/CiscoDevNet/webex-contact-center-api-samples/tree/main/customer-journey-samples/UC2-tracking-the-repeat-caller>

# Use Case 3 - Saving the Customer

Late night caller

## Postman Examples:

- |                                                 |                                    |
|-------------------------------------------------|------------------------------------|
| UC3 - Create Profile Template Closed Caller     | - Create Progressive Profile       |
| UC3 - Progressive Profile View Closed Caller    | - Get profile view                 |
| UC3 - Create Journey Actions For Closed Callers | - Action Rules required to execute |
| UC3 - Get Journey Actions For Closed Callers    | - View the rules                   |
| UC3 - POST Unstaffed Closed Caller Info         | - Post Unstaffed Closed to JDS     |
| UC3 - POST Closed Caller Info                   | - Post Closed to JDS               |

\*\* Individual Event broadcasting coming soon\*\*

See video for an example and demonstration

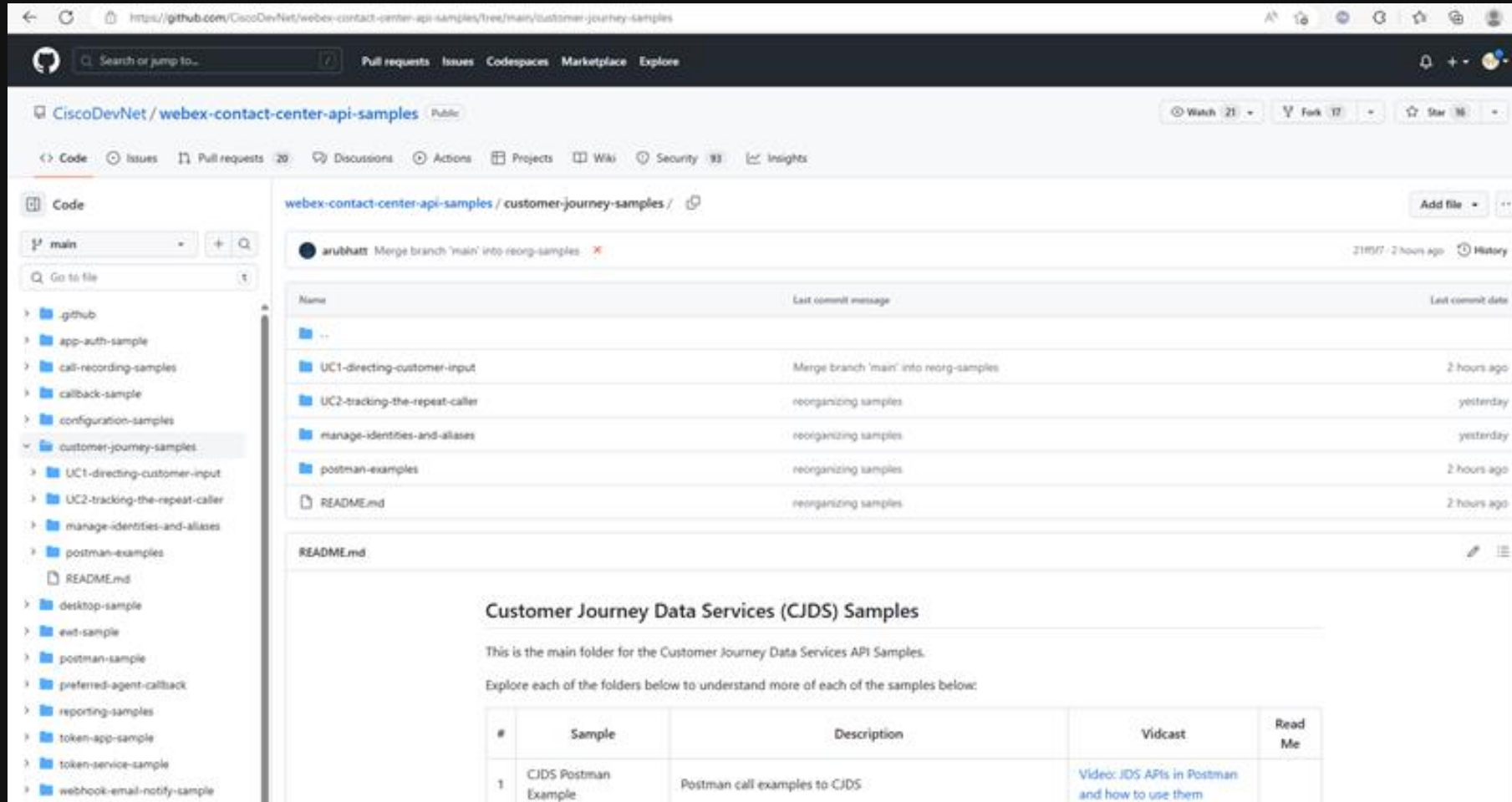
<https://app.vidcast.io/share/946a6f80-e7ba-4387-adc3-66249cac0d43>



Thank you!

# Appendix

# Important Resources – CiscoDevNet



The screenshot shows a GitHub repository page for CiscoDevNet/webex-contact-center-api-samples. The repository is public and has 21 watches, 17 forks, and 16 stars. The current view is the 'customer-journey-samples' folder, which contains several subfolders and a README.md file. The README.md file is titled 'Customer Journey Data Services (CJDS) Samples' and provides a brief overview of the samples. It includes a table with the following data:

#	Sample	Description	Vidcast	Read Me
1	CJDS Postman Example	Postman call examples to CJDS	<a href="#">Video: JDS APIs in Postman and how to use them</a>	

<https://github.com/CiscoDevNet/webex-contact-center-api-samples/tree/main/customer-journey-samples>

# Important Resources

JDS APIs - <https://developer.webex-cx.com/documentation/journey>

JDS Overview Vidcast - <https://app.vidcast.io/share/889c2cbf-51b2-4cc9-94f8-9143078dca83>

JDS Use Case and example Vidcast

- <https://app.vidcast.io/collections/share/a3d5d3c9-faf8-4773-a16d-1abc27361113>

CloudEvent Spec Details -

<https://github.com/cloudevents/spec/blob/v1.0.2/cloudevents/spec.md>

JDS Widget GitHub Link - <https://github.com/CiscoDevNet/cjaas-widgets>

Cisco Momentum Design (icons) - <https://momentum.design/icons>



# Handy Resources

Javascript Tester- <https://webtoolkitonline.com/javascript-tester.html>

JSON Beautifier- <https://jsonbeautifier.org/>

JSON UnEscape - <https://www.freeformatter.com/json-escape.html#before-output>

JSONtoString Format to 1 line - <https://jstontstring.com/convert-json-to-one-line>

Test Database - <https://mockapi.io/projects>

Webhook Testing - <https://webhook.site/>

GraphQL to JSON - <https://datafetcher.com/graphql-json-body-converter> or  
<https://insomnia.rest/> (free for one cloud project)