

# Webex Experience Management Integration with Contact Center Express

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## Introduction

This document describes in detail the configuration, call flow, and Unified Contact Center Express (UCCX) script configurations needed to provide for inline survey integration between UCCX and the Webex Experience Management (WxM) platform.

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- UCCX 12.5
- Cloud Connect
- WxM platform

### Components Used

- UCCX 12.5 Engineering Special (ES) 01
- WxM platform

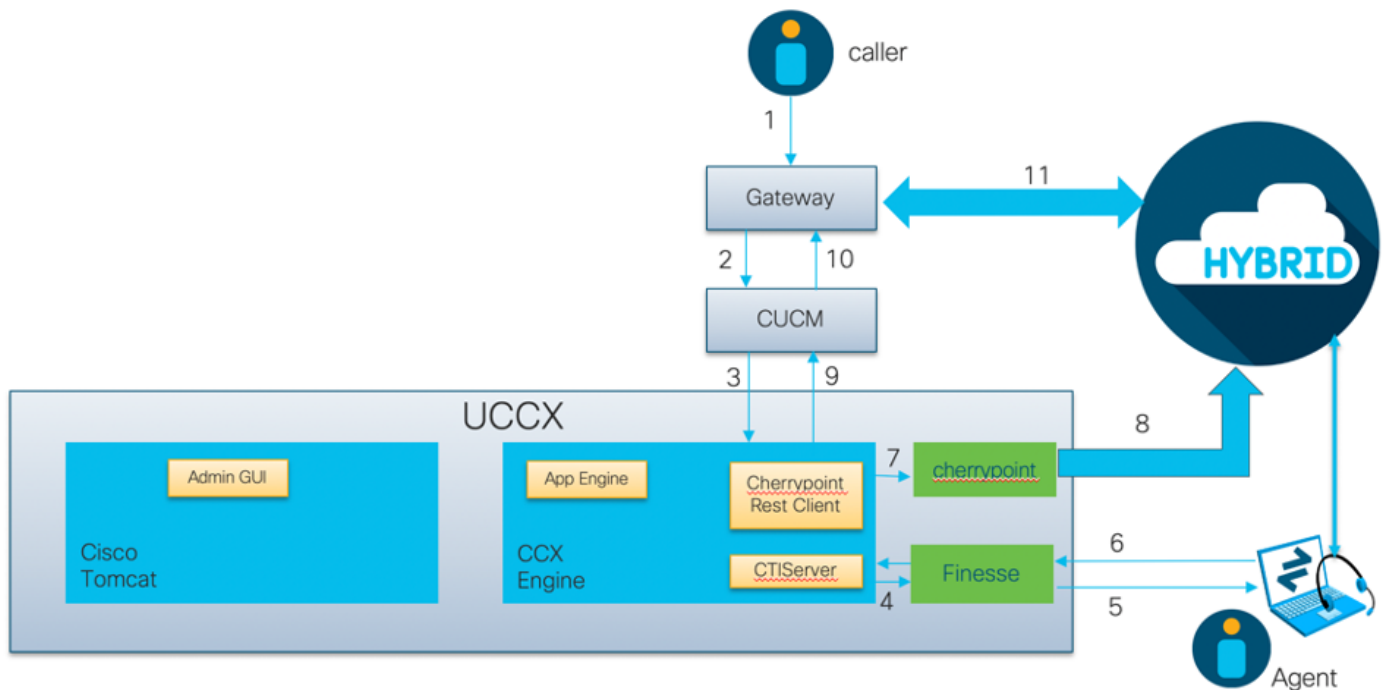
The information in this document was created from the devices in a specific lab environment. All of

the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

## Background Information

WxM is Cisco's next generation Customer Experience Management (CEM) platform. It enables improved customer experiences by giving businesses the ability to analyze and consolidate customer journey information and customer surveys from different touch points, and then view them in real-time after Contact Center interactions.

### Inline Survey Voice Call Flow



- The caller calls into the Contact Center through the voice gateway.
- The voice gateway forwards the call to Cisco Unified Communications Manager (CUCM) for call processing.
- CUCM sends the call to a computer telephony integration (CTI) route point which is associated with the UCCX Java Telephony API (JTAPI) user.
- UCCX identifies the agent to route call to, reserves the agent on Finesse, and sends the request to CUCM to route the call to agent phone.
- The agent answers the call from the Finesse desktop and the call is connected between the agent and the caller.
- When the agent ends the call on the Finesse desktop, an end call notification is sent to UCCX.
- If the application has a WxM questionnaire associated, UCCX invokes the REST client and sends the call details to the cherrypoint container running in the Cloud Connect component.
- The cherrypoint container makes an API request to push the call details to WxM cloud securely using an auth token. WxM cloud sends a SIP URI back to UCCX. This is the pattern to which UCCX has to send call to for inline survey.
- When UCCX receives the SIP URI dialing, it sends the pattern to CUCM as a redirect request.
- CUCM sends the request to voice gateway.

- Voice gateway, with its dial-peer configuration, will forward the call to WxM Twilio gateway to play the inline survey.

## Configure

### UCCX Configuration

In order to integrate WxM with UCCX, a WxM license needs to be purchased. The WxM team performs the onboarding after the purchase and an email with essential configuration details is then sent to the registered email address provided.

The email contains this essential information:

- Desktop user and API key
- System user and API key
- Deployment ID
- SIP URI domain
- Web URI prefix
- Voice PIN prefix

The Cloud Connect and cherrypoint configurations are done through the CLI within UCCX.

1. Once the email is received, you then need to SSH into the UCCX CLI and enter the command `set cloudconnect cherrypoint config` in order to initiate the configuration.

```
admin:set cloudconnect cherrypoint config
Fetching existing configuration...
Enter the Config details to be saved:
Desktop User (with Read Only Privileges)
Desktop User API Key [*****]:
System User (with Read and Write Privileges)
System User API Key [*****]:
Voice PIN Prefix
SIP URI Domain
Web URL Prefix
Deployment ID
Proxy Enabled(true/false) [false]:
```

2. The UCCX server requires access to the Internet in order to connect to WxM. If your server is not in a DMZ, configure a proxy server and specify the proxy server details when filling out the required configuration items within the `set cloudconnect cherrypoint config` command.
3. In order to verify that your UCCX is able to reach WxM, enter the `utils cloudconnect cherrypoint test-connectivity` command within the CLI. Enter the proxy server host and port information when prompted, and your UCCX system will test its connectivity. You will see a success message as shown here if the connection was successful.

```
[admin:utils cloudconnect cherrypoint test-connectivity
[Cloudcherry Connectivity Test URL [https://api.getcloudcherry.com/api/]:
[Proxy Host:
[Proxy Port:
Connectivity check to https://api.getcloudcherry.com/api/ was successful.
admin:]
```

4. Browse to the **UCCX appadmin page**, choose **Applications > Application Management**, and choose the application to which the inline survey needs to be enabled. Check the **Enable Cisco Webex Experience Management post-call survey** checkbox within the application setup. Click the **IVR** radio button. From the IVR drop-down list, choose the survey

questionnaire you want to play to the caller after the agent disconnects the call from the customer. Click **Update** for the changes to take effect.

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Advanced Configuration

Enable Cisco Webex Experience Management post-call survey

IVR

SMS/Email

Post Call Feedback

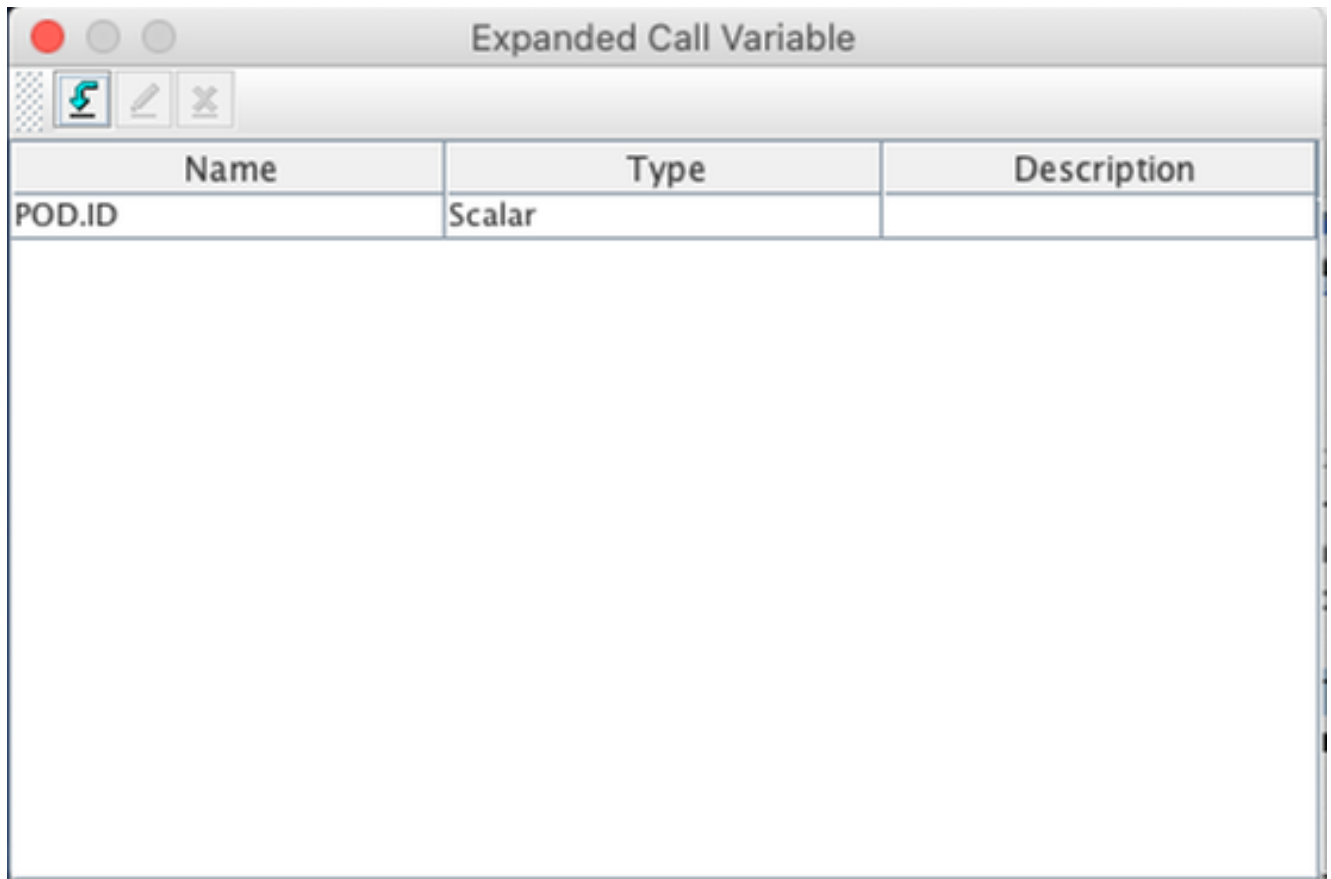
Demo Email

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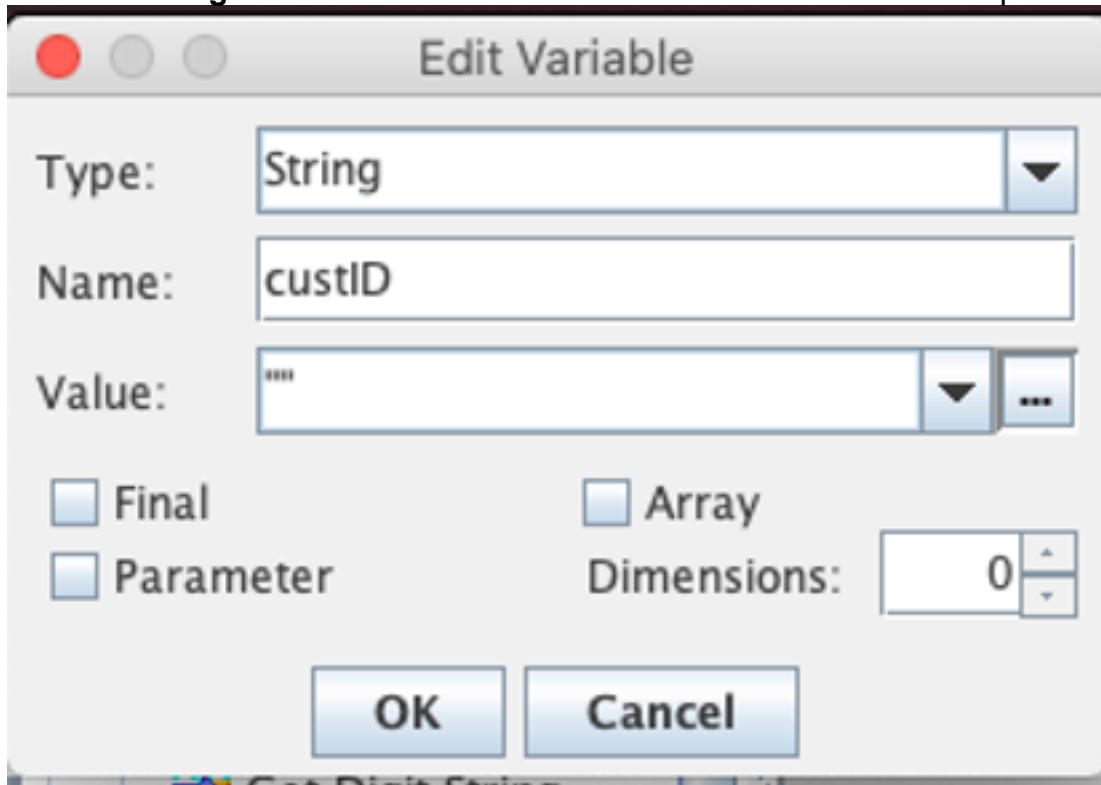
## UCCX Scripting Configuration

**Note:** This document describes steps to collect customer ID information by prompting the caller to input their ID. There are multiple ways to achieve this task.

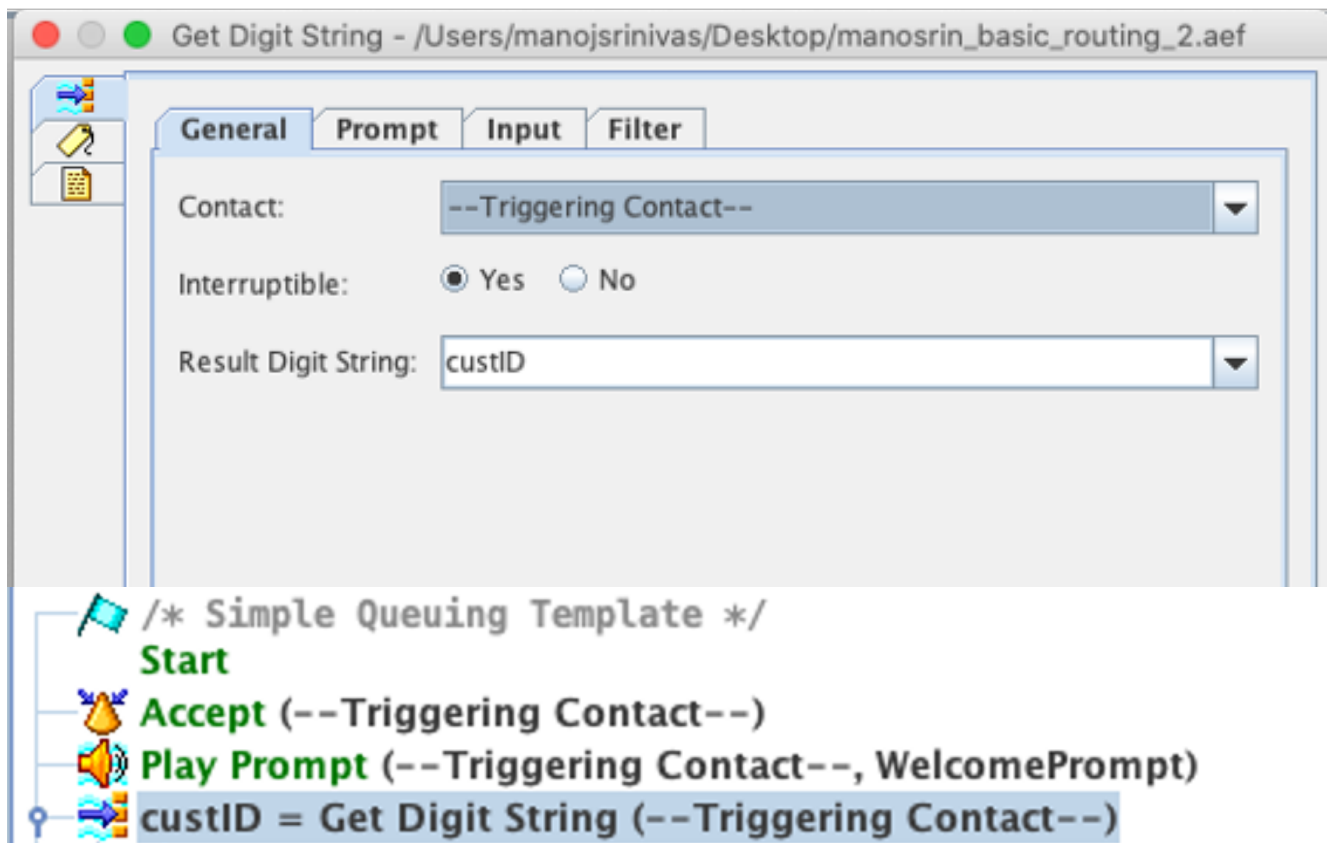
1. In the UCCX script, create an ECC variable called **POD.ID**. This variable stores the customer ID which is needed for WxM to work. Since WxM filters the response based on customer ID, this value needs to be unique. This is a mandatory variable for the customer survey to work.



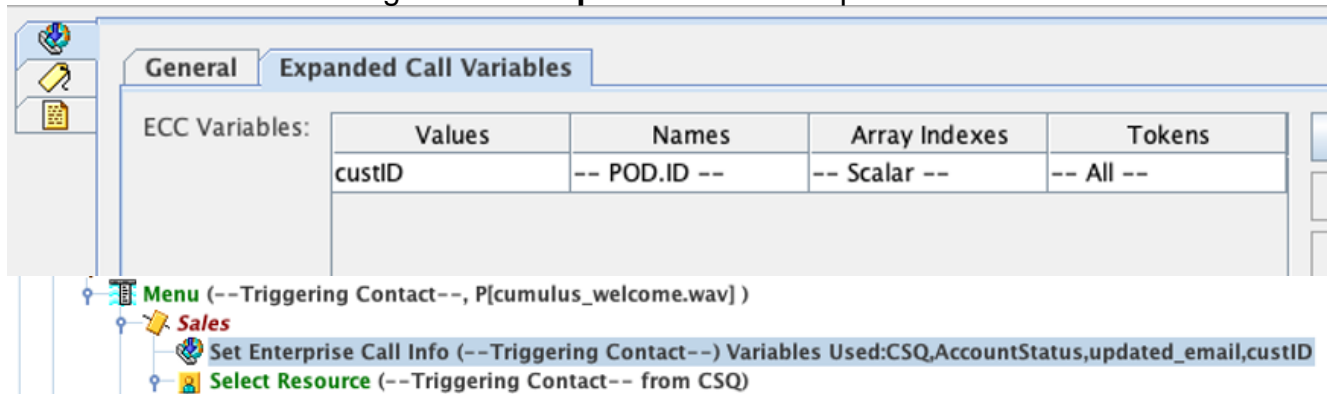
2. Create a **string variable** which can store the customer ID information provided by the caller.



3. Create a **Get Digit String** step to prompt a caller and request that their customer ID be entered, receive the DTMF digits entered by the caller and then store the digits entered within a string variable created in the previous step. In this example, the variable *custID* will store the input digit string from the caller.



4. Associate the value of the string variable (which stores the digit string from caller) to the POD.ID ECC variable using a **Set Enterprise Call Info** step.

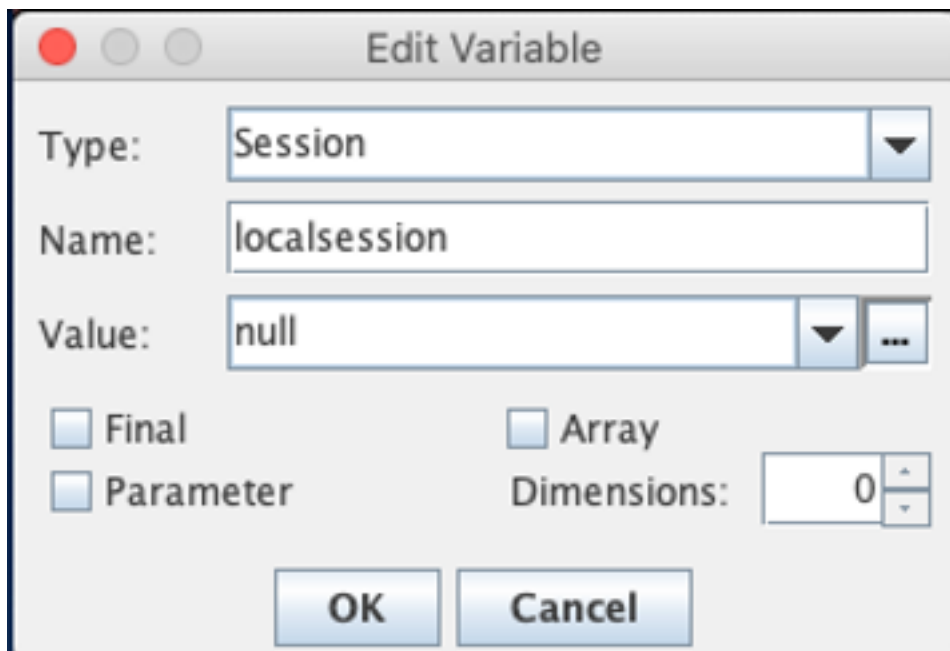


By default, all callers will be transferred to WxM for the survey. If you require callers to opt in/out of the survey, you will need to create a session variable *ccx\_survey\_opt\_in*. A Boolean value of **'true'** in this session variable represents that the caller is interested in participating in a post-call survey. A Boolean value of **'false'** indicates that the caller would like to opt out of survey.

If you would like to provide this survey opt in/out option to the caller, complete these steps:

**Note:** There are multiple ways to achieve this task. One option is documented here.

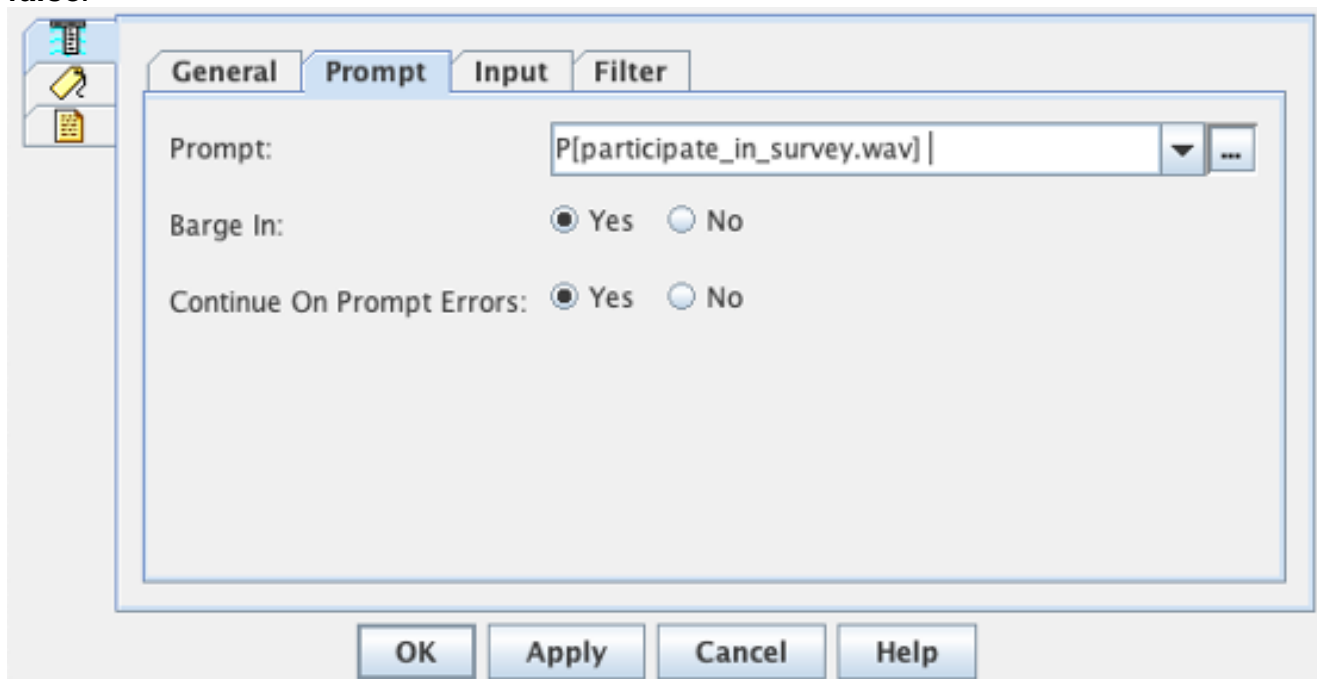
1. Create a new **session variable**.

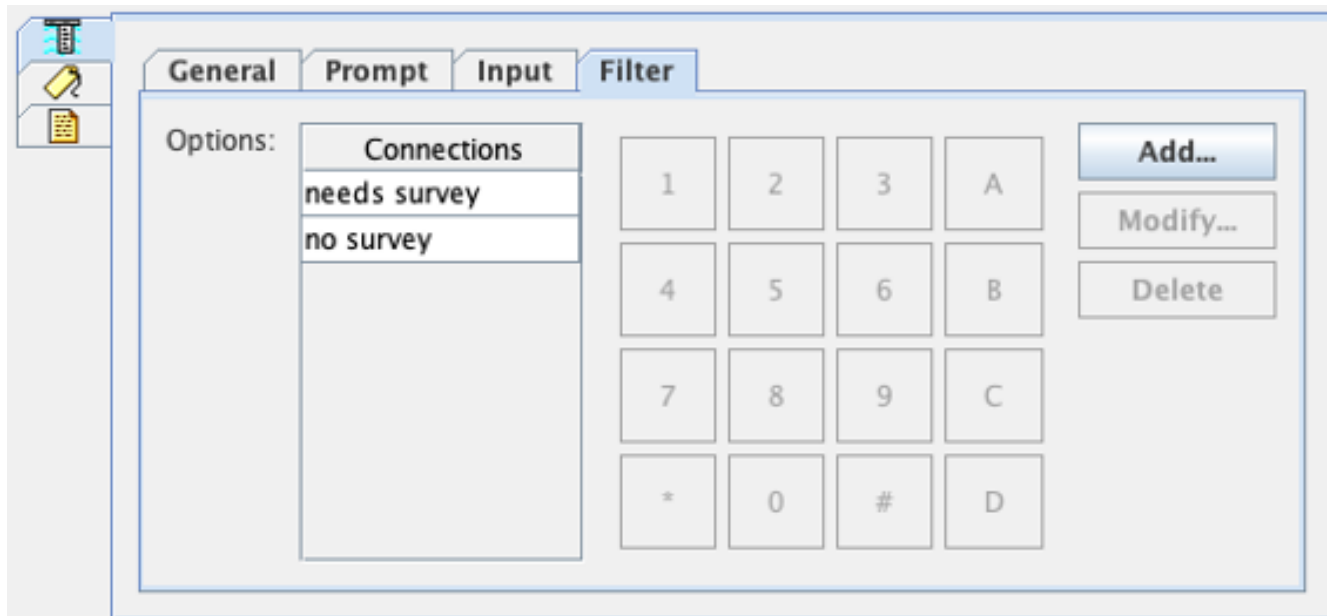


2. Create two **Boolean variables**.

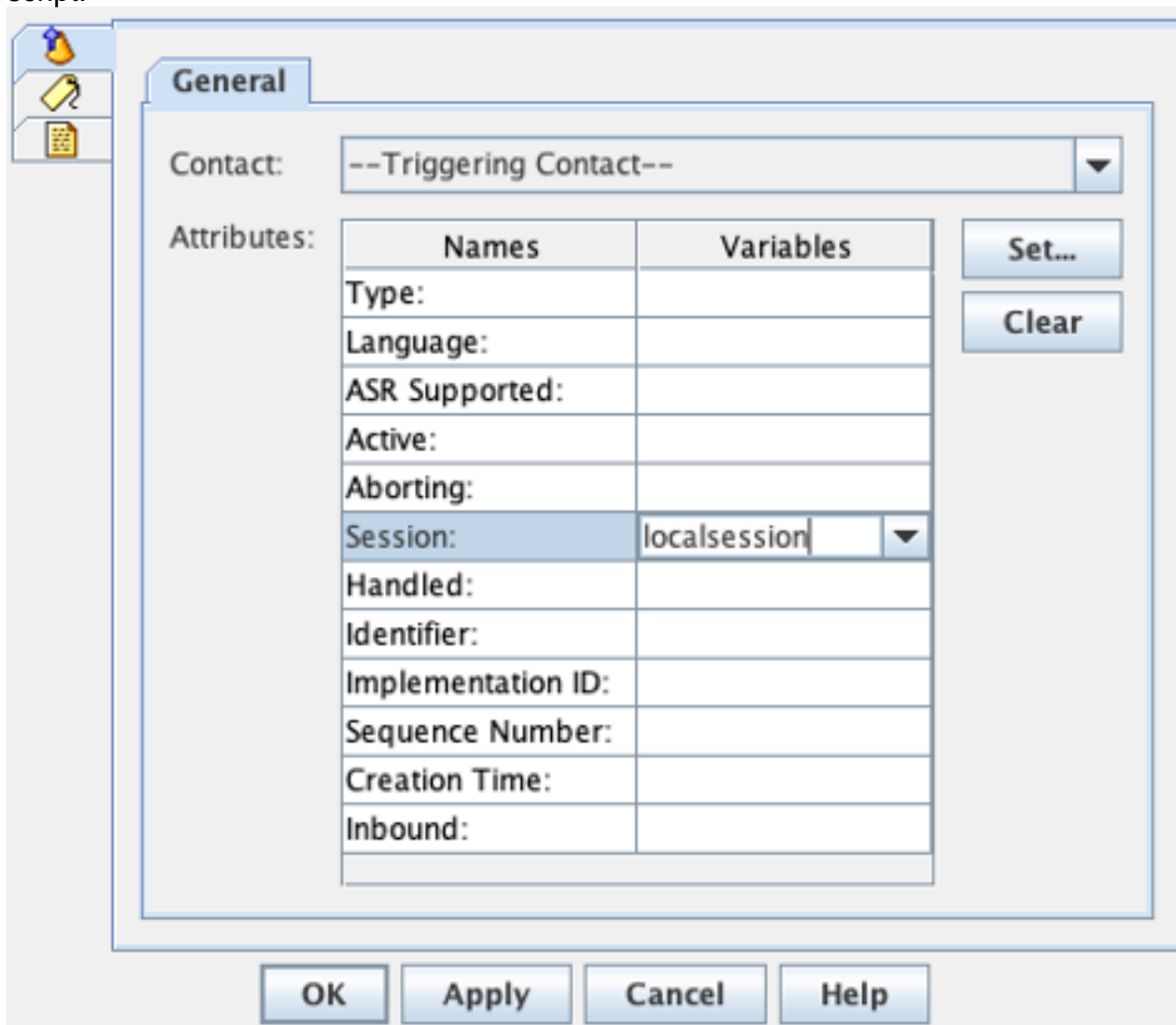
opt_in_false	boolean	false	
opt_in_true	boolean	true	

A **Menu** step will be created and play a prompt asking the caller if they are willing to participate in a survey after agent disconnect. If the caller inputs option **1**, the session variable will be updated with **true**. And if the caller inputs option **0**, the session variable will be updated with **false**.



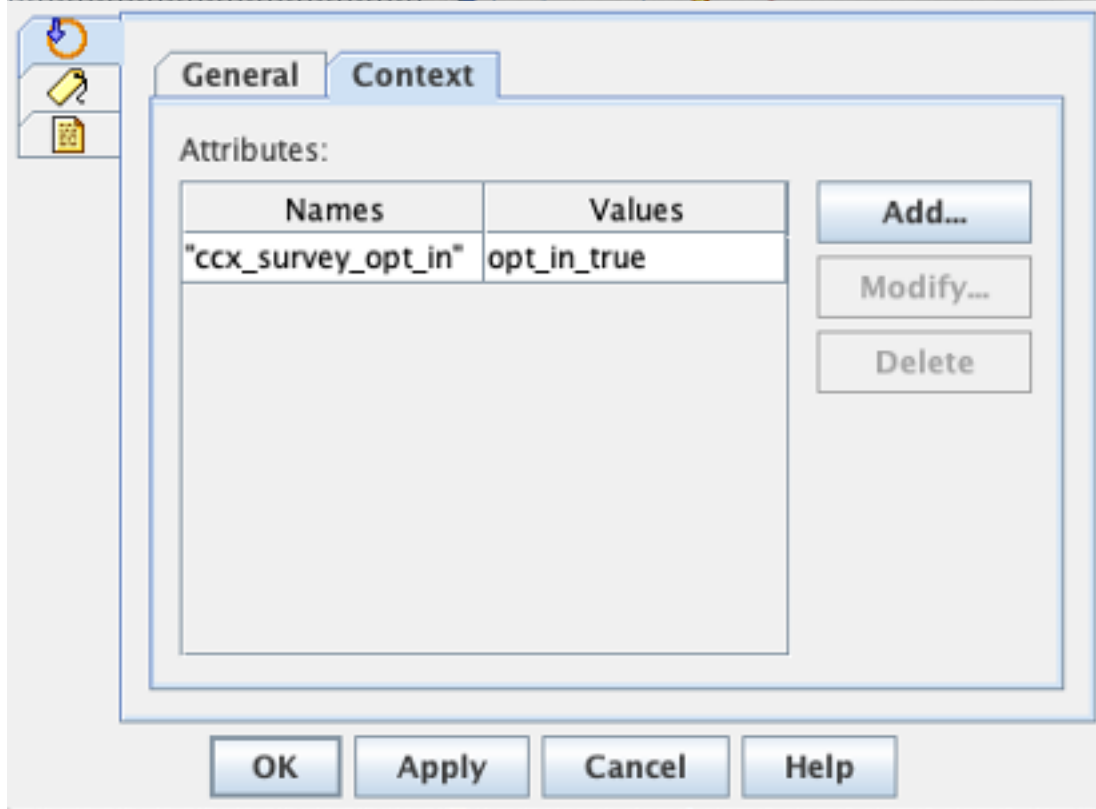
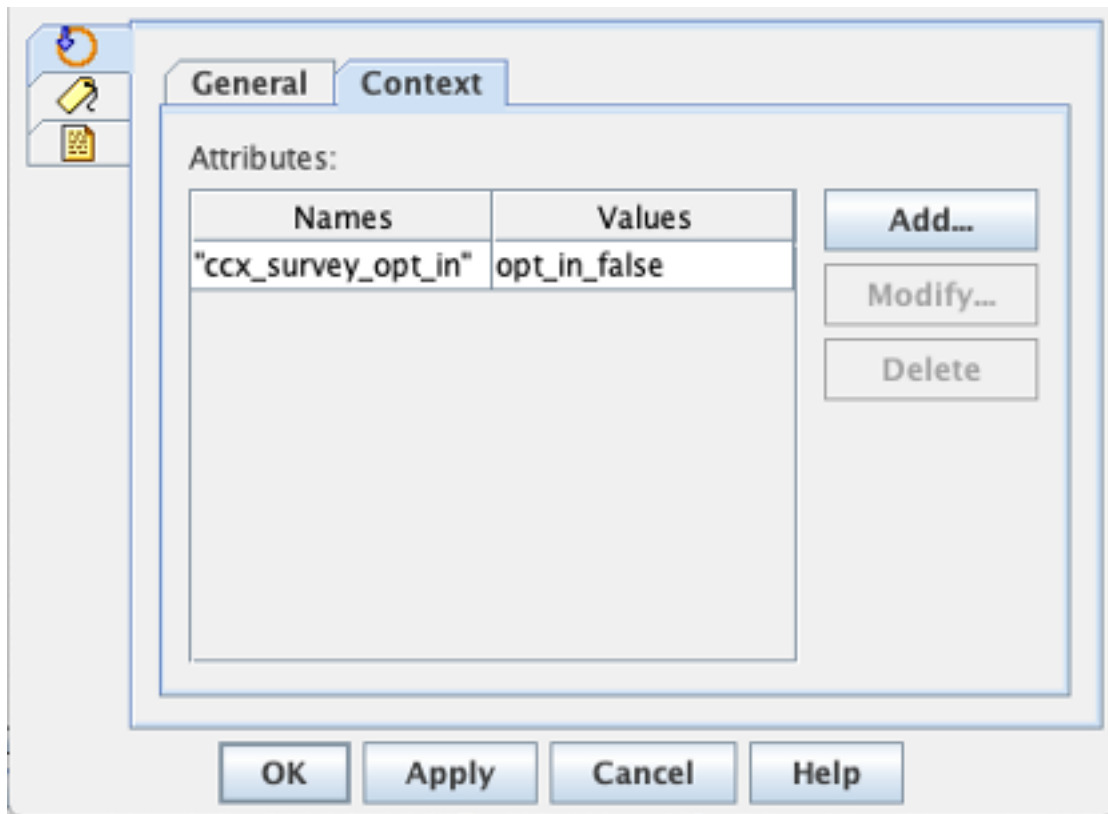


- Under each of the connections, create a **Get Contact Info** step. This step extracts information from particular type of object and stores it in a script variable to make the information about the contact available for subsequent steps in the script.



- Depending on which path the call is taking, set the **ccx\_survey\_opt\_in** session variable with value 'true' or 'false'.

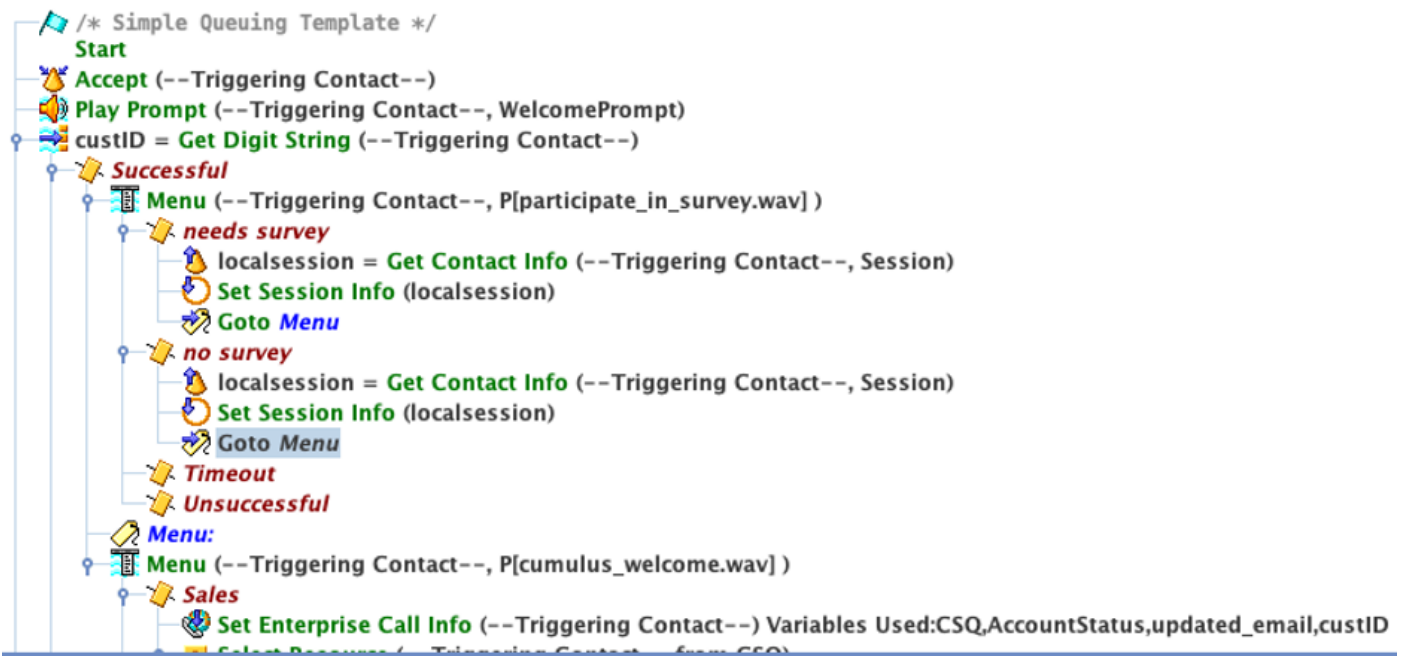




5. Complete the rest of the script configuration to route the call to CSQ and the agent.

6. Upload the script to UCCX **script management** and associate the script with the application which has WxM enabled for inline-survey.

A screenshot of a sample script with the steps/variables outlined is shown here:



## Finesse Configuration

As a first step in integrating the Finesse component with WxM, you need to add the Cloud Connect server FQDN and login credentials in the Finesse server. This step is crucial in getting the Finesse WxM gadgets to work within the Finesse agent and supervisor desktops.

When the agent logs in to the desktop, the gadget uses the auth token received from the Finesse server to communicate with the cloud to pull gadget data. For this to work, the Finesse server should have the Cloud Connect server information to fetch the auth token. Since the Cloud Connect and Finesse components both reside within the UCCX box, you do not have to exchange any server certificates.

1. In order to configure Cloud Connect information in Finesse, launch and log in to the **cfadmin** page.
2. In the **Settings** tab, look for **Cloud Connect Server Settings**. Configure the **Publisher** and **Subscriber addresses** as your UCCX Pub and Sub FQDN. Provide the server **Username** and **Password**.

# Cloud Connect Server Settings

---

Username\*

admin

Password\*

••••••••

Publisher Address\*

uccx.cc.com

Subscriber Address

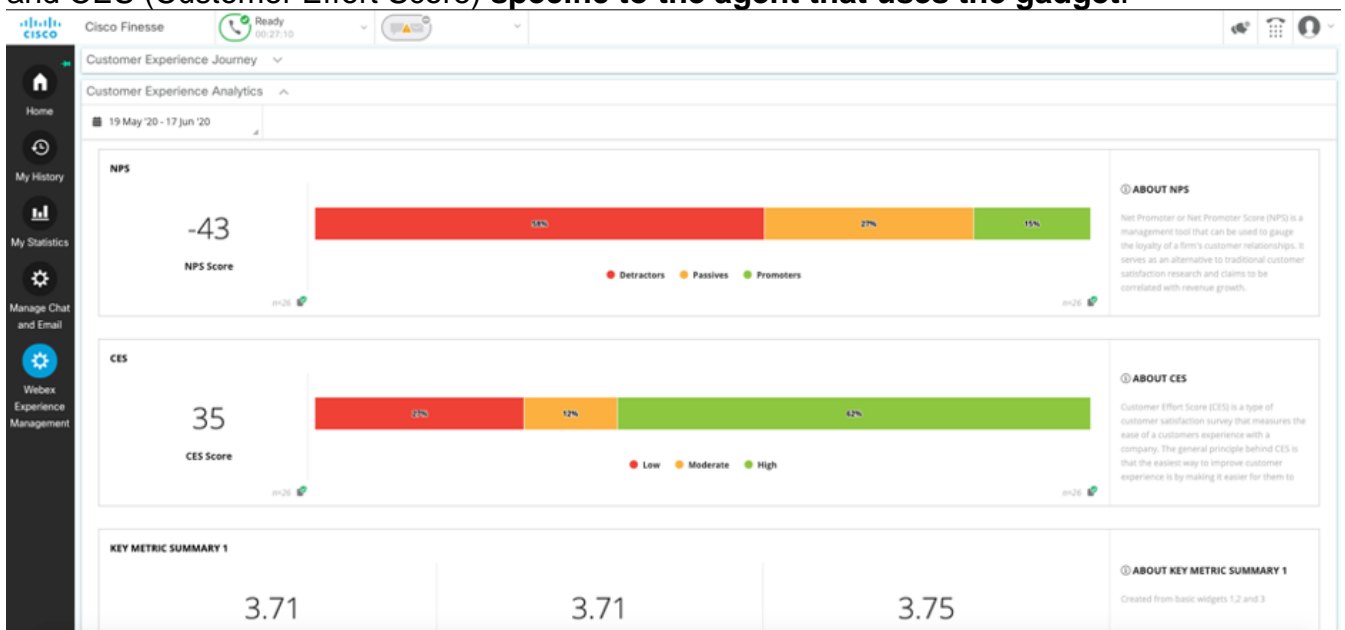
*subscriberHost*

## WxM Gadgets

WxM enables two different types of WxM gadgets for you to display within call center agents and supervisors.

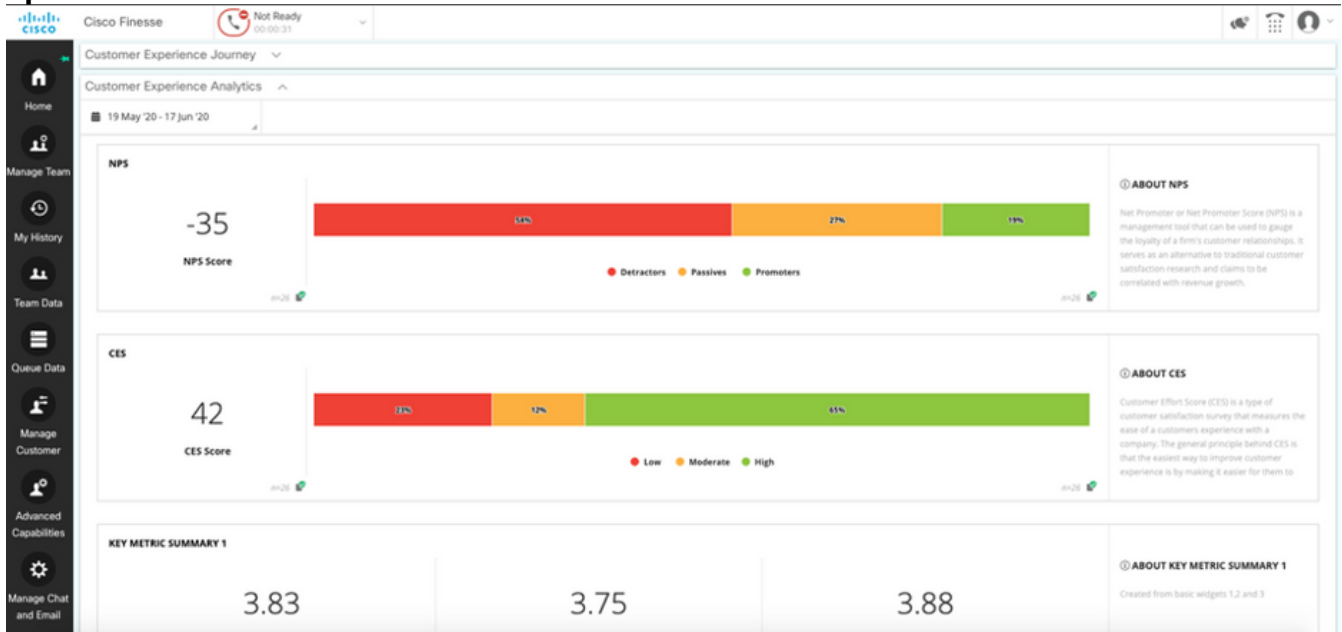
### Customer Experience Analytics Gadget:

- For agents, the Customer Experience Analytics (CEA) gadget displays industry standard metrics such as NPS (Net Promoter Score), CSAT (Customer Satisfaction score), and CES (Customer Effort Score) **specific to the agent that uses the gadget.**



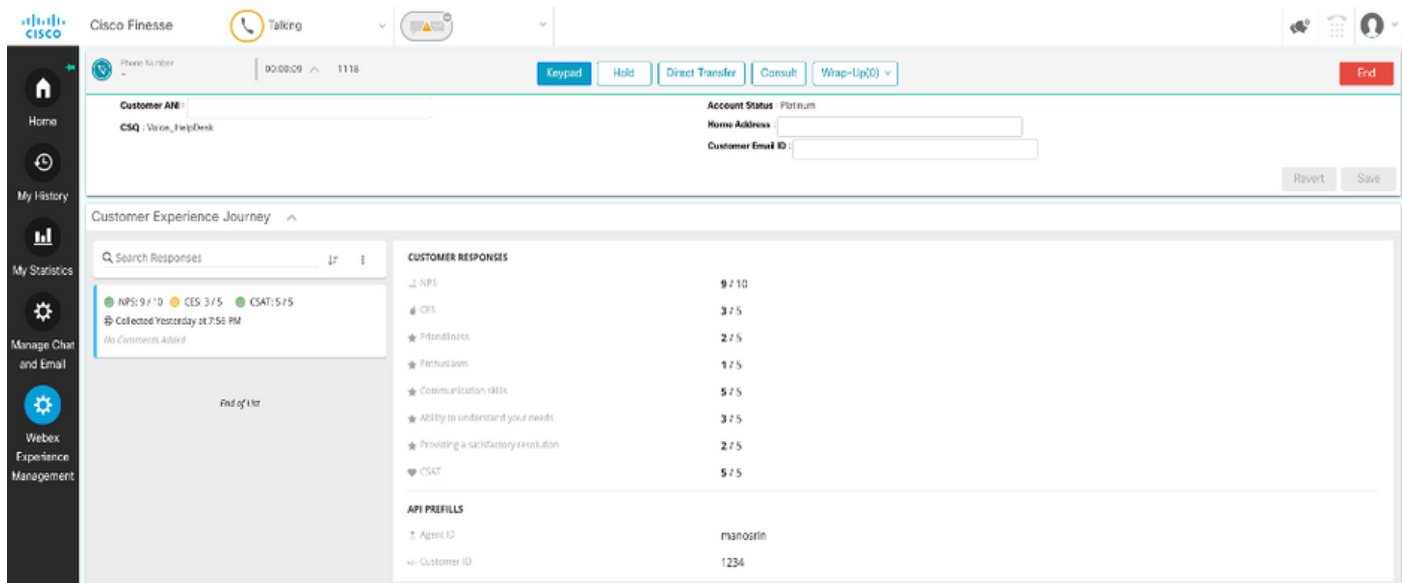
- For supervisors, this gadget displays industry standard metrics such as NPS, CSAT, and CES

specific to their team.



## Customer Experience Journey Gadget

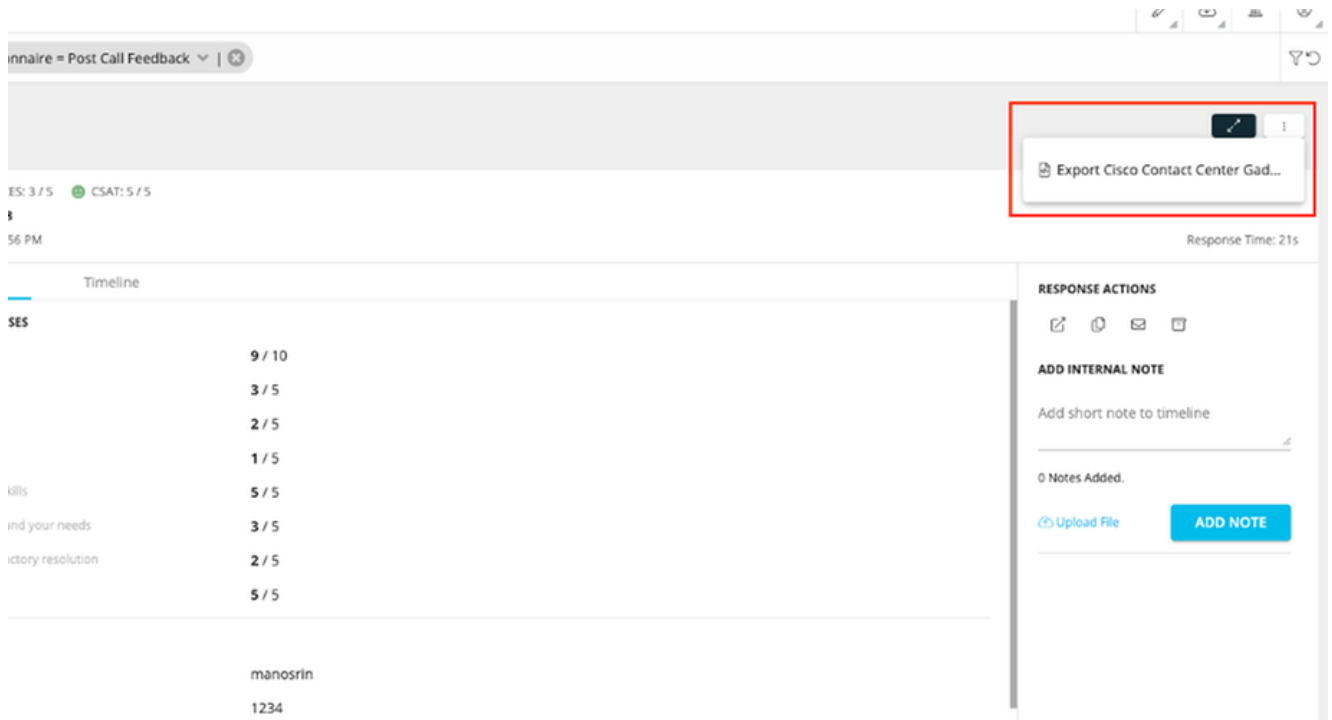
The Customer Experience Journey (CEJ) gadget displays all the past survey responses from the calling customer as an agent answers the call.



## Gadget Enablement

In order to add the **CEJ gadgets** to the Finesse desktops, complete these steps:

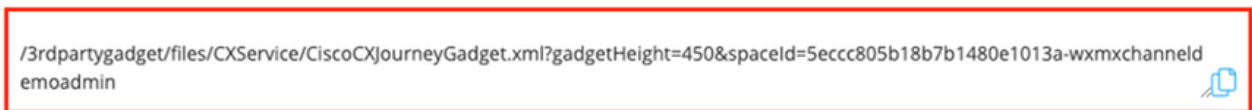
1. Log in to WxM with the admin account.
2. Go to **Overall Experience**.
3. Choose the **3 vertical button** or **vertical ellipsis**.
4. Click the **Export Cisco Contact Center Gadget**.



5. Copy the URL from the page.

FILTER(S) APPLIED IN THIS SPACE

Questionnaire = Post Call Feedback



DONE

6. Add the **CEJ gadget XML reference** to the **Finesse layout(s)**: Browse to the **Finesse cfadmin page**. Go into the **desktop layout** where you want to add this new gadget. Paste the URL copied from previous step. You can place the gadget under existing tab or create a new tab for WxM and paste the URL there. Paste the URL under Agent and Supervisor section. This screenshot below shows an example with a new tab configured.

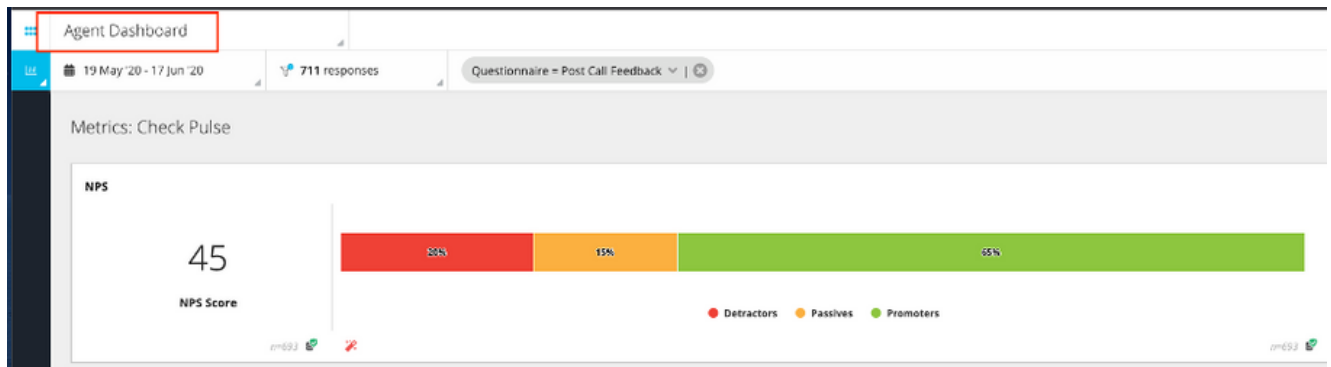
```

<tab>
  <id>WxM</id>
  <icon>history</icon>
  <label>Webex Experience Management</label>
  <columns>
    <column>
      <gadgets>
        <gadget>/3rdpartygadget/files/CXService/CiscoCXJourneyGadget.xml?gadgetHeight=450&spaceId=5ecc805b18b7b1480e1013a-wxmxchanneldemoadmin</gadget>
      </gadgets>
    </column>
  </columns>
</tab>

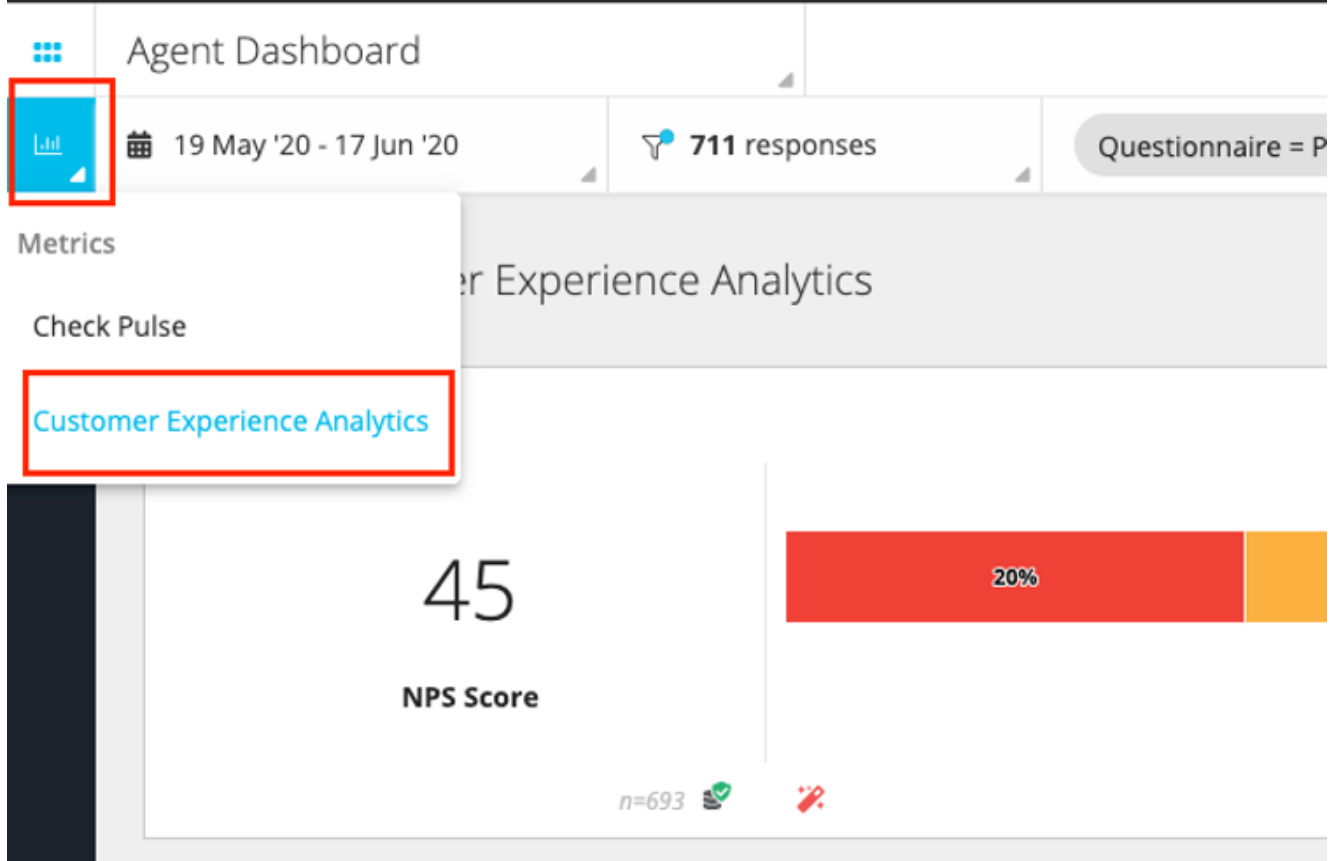
```

In order to add the **CEA gadgets** to the Finesse desktops, complete these steps:

1. Log in to WxM admin portal.
2. Go to the Agent Dashboard space.



3. Under Metrics, choose **Customer Experience Analytics**.



4. Choose the **3 vertical button** or **vertical ellipsis**.

5. Click **Export Cisco Contact Center Gadget**.

6. Copy the URL from the page.

FILTER(S) APPLIED IN THIS SPACE

Questionnaire = Post Call Feedback

/3rdpartygadget/files/CXService/CiscoCXAnalyticsGadget.xml?spaceId=5ecc805b18b7b1480e1013b-wxmxchanneldemoadmin&metricId=104034341424217031265235014-wxmxchanneldemoadmin

In order to configure the **CEA gadget for use within the Agent desktops**, complete these steps:

1. Browse to the Finesse cfadmin page.
2. Go into the desktop layout where you want to add this new gadget. You can place this just below the CEJ gadget.
3. Add **&filterTags=cc\_AgentId** to the end of the URL for the agent. This will filter the results per agent ID in the agent desktop.

```

<tab>
  <id>WxM</id>
  <icon>history</icon>
  <label>Webex Experience Management</label>
  <columns>
    <column>
      <gadgets>
        <gadget>/3rdpartygadget/files/CXService/CiscoCXJourneyGadget.xml?gadgetHeight=450&spaceId=5ecc805b18b7b140e1013a-wmxchanneldemoadmin</gadget>
        <gadget>/3rdpartygadget/files/CXService/CiscoCXAnalyticsGadget.xml?spaceId=5ecc805b18b7b140e1013a-wmxchanneldemoadmin&metricId=7495152181161525414446053860-wmxchanneldemoadmin&filterTags=cc_AgentId</gadget>
      </gadgets>
    </column>
  </columns>
</tab>
</gadget>/3rdpartygadget/files/CXService/CiscoCXAnalyticsGadget.xml?spaceId=5ecc805b18b7b140e1013a-wmxchanneldemoadmin&metricId=7495152181161525414446053860-wmxchanneldemoadmin&filterTags=cc_AgentId</gadget>

```

In order to configure the **CEA gadget** for use within the **Supervisor desktops**, complete these steps:

1. Log in to the WxM admin portal.
2. Choose **Supervisor Dashboard** space.
3. Choose the **3 vertical button** or **vertical ellipsis**.
4. Click the **Export Cisco Contact Center** gadget.
5. Copy the **URL** from the page.
6. Browse to the **Finesse cfadmin** page.
7. Go into the desktop layout where you want to add this new gadget
8. Add **&filterTags=cc\_TeamID** at the end of the URL and add the URL in desktop layout under the **supervisor section**. This will filter the results specific to supervisor's team.

```

<icon>settings</icon>
<label>Webex Experience Management</label>
<columns>
  <column>
    <gadgets>
      <gadget>/3rdpartygadget/files/CXService/CiscoCXJourneyGadget.xml?gadgetHeight=450&spaceId=5ecc805b18b7b140e1013a-wmxchanneldemoadmin</gadget>
      <gadget>/3rdpartygadget/files/CXService/CiscoCXAnalyticsGadget.xml?spaceId=5ecc805b18b7b140e1013a-wmxchanneldemoadmin&metricId=61135413553322731584658225027-wmxchanneldemoadmin&filterTags=cc_TeamId</gadget>
    </gadgets>
  </column>
</columns>
</tab>
</gadget>/3rdpartygadget/files/CXService/CiscoCXAnalyticsGadget.xml?spaceId=5ecc805b18b7b140e1013a-wmxchanneldemoadmin&metricId=61135413553322731584658225027-wmxchanneldemoadmin&filterTags=cc_TeamId</gadget>

```

## Communications Manager Configuration

When UCCX receives the SIP URI response from WxM, UCCX sends a redirect request to CUCM to route the call to SIP URI. In order to accomplish this, configure a SIP trunk in CUCM that points to your voice gateway.





Name	Description	Calling Search Space	Device Pool	Route Pattern	Partition	Route Group	Priority	Trunk Type	SIP Trunk Status	SIP Trunk Duration	SIP Trunk Security Profile
cube.tmedemo.com	cube.tmedemo.com	Default	35.225.151.21					SIP Trunk	Full Service	Time In Full Service: 11 days 2 hours 20 minutes	Non Secure SIP Trunk Profile with UDP
cube.tmedemo.com	cube.tmedemo.com	Default	35.232.179.13					SIP Trunk	Full Service	Time In Full Service: 11 days 2 hours 20 minutes	Non Secure SIP Trunk Profile with UDP

Within the CUCM administration interface:

1. Navigate to **Call Routing > SIP Route Pattern**.
2. Configure a SIP route pattern for **cloudcherry.sip.twilio.com**.


System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

## SIP Route Pattern Configuration

 Save
  Delete
  Copy
  Add New

---

**- Status -**

 Status: Ready

---

**- Pattern Definition -**

Pattern Usage: Domain Routing  
 IPv4 Pattern\*:   
 IPv6 Pattern:   
 Description:   
 Route Partition:   
 SIP Trunk/Route List\*:  [\(Edit\)](#)  
 Block Pattern

---

**- Calling Party Transformations -**


Use Calling Party's External Phone Mask  
 Calling Party Transformation Mask:   
 Prefix Digits (Outgoing Calls):   
 Calling Line ID Presentation\*:   
 Calling Line Name Presentation\*:

---

**- Connected Party Transformations -**

Connected Line ID Presentation\*:   
 Connected Line Name Presentation\*:

---

 \*- indicates required item.

## Voice Gateway Configuration

1. Configure a standard **incoming dial-peer** from CUCM.

```

dial-peer voice 300 voip
description incoming dial-peer from CUCM [redacted]
session protocol sipv2
session server-group 101
incoming uri via 300
voice-class codec 1
voice-class sip bind control source-interface GigabitEthernet1
voice-class sip bind media source-interface GigabitEthernet1
dtmf-relay rtp-nte
no vad
  
```

2. Configure an **outgoing dial-peer** to **cloudcherry.sip.twilio.com**. The gateway needs to have internet access to reach Twilio gateway.



```
dial-peer voice 280 voip
description to Cloud Cherry
session protocol sipv2
session target dns:cloudcherry.sip.twilio.com
destination uri 400
voice-class codec 1
voice-class sip bind control source-interface GigabitEthernet2
voice-class sip bind media source-interface GigabitEthernet2
voice-class sip requiri-passing
dtmf-relay rtp-nte
no vad
```

## Verify

Use this section in order to confirm that your configuration works properly.

1. Log in to Agent/Supervisor desktop and verify the CEA gadget loads with NPS and CSAT data.
2. Next, place a test call and verify the CEJ gadget loads up with previous customer surveys for the specific customer ID.

## Troubleshoot

There is currently no specific troubleshooting information available for this configuration.