Contact Center Help: Call Flow Authoring

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About Call Flow Authoring

A Call Flow is a connected series of call actions and configurable parameters that describes a possible caller experience through the different phases of the call. Call Flows are created and edited by Contact Center users (called Call Flow authors). Call Flows are associated with Contact Center Campaigns. There can be multiple versions of a Call Flow in use simultaneously.

The Call Flow Designer is the graphical "drag and drop" tool you use to create Call Flows.

Figure 0-1: The Call Flow Designer
General Topics

Call Flows and Campaigns

A Call Flow is part of the overall call routing hierarchy. Call flows are associated with a parent Campaign (which in turn belongs to a Program, and the Program belongs to a Client). Call Flows exist in a "many to many" relationship with Campaigns: more than one Campaign, from different Programs and Clients, can point to the same Call Flow.

There are two types of Campaigns in the LiveOps Cloud Contact Center Platform: standard (IVR based) and enterprise (call flow based). In a standard Campaign, most of the call experience configuration is done at the Campaign level. Standard Campaigns have no built-in way of incorporating flow logic or sophisticated Agent selection or routing decisions. Often IVRs are used for that purpose. (The benefit of a standard Campaign is it can be somewhat simpler to configure than a Call Flow). Enterprise Campaigns rely on Call Flows for virtually all of the caller experience configuration.
Every Call Flow goes through four distinct phases, as described in Table 2-1. These phases represent the caller's experience during different parts of the call. The Call Flow Designer options available to the author depend on the call phase. For example, Call Actions can only be applied to the Arrival and Queue phases. The On Call and Post Call phases are controlled via configuration fields.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival</td>
<td>From receipt of the call by the LiveOps platform to entry into the queue.</td>
</tr>
<tr>
<td>Queue</td>
<td>From entry into the queue to connecting to an Agent.</td>
</tr>
<tr>
<td>On Call</td>
<td>From connecting to an Agent to caller hang up.</td>
</tr>
<tr>
<td>Post Call</td>
<td>From caller hang up to the end of the call.</td>
</tr>
</tbody>
</table>
Call Actions

Call Actions are distinct actions to perform within a Call Flow. Call Flow authors select the Call Actions they want from a palette in the Call Flow Designer and drag them into the desired order the appropriate call phase. The Call Actions palette provides authors with a rich selection of actions from which to choose. For example, there are Call Actions that play audio, collect DTMF, find an Agent, etc. There are other Call Actions that let you branch your Flow based on caller input, Call Attribute values or data passed in from outside the call.

Figure 3-1: Call Actions. Drag an action from the palette to the call phase target area.
Call Attributes

Call Attributes let you store and manipulate call related data within a Call Flow. Many Call Actions can be based on these Attributes. For example, you can create a logic branch based on a Call Attribute set previously in the Call Flow. Similarly, you can use Call Attributes to select Agents and specify transfer destinations.

There are two kinds of Call Attributes: inherited Call Attributes, which can be used in any Call Flow, and Call Flow Call Attributes, which can be used only in the Call Flow for which they were created. You can think of inherited Call Attributes as a kind of global or shared variable, while Call Flow Call Attributes are private or local variables.

Table 4-1 summarizes the differences between Call Flow and inherited Call Attributes:

<table>
<thead>
<tr>
<th>Inherited Call Attributes</th>
<th>Call Flow Call Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can be used by all Call Flows in your Contact Center.</td>
<td>• Can be used only in the Call Flow in which they were created.</td>
</tr>
<tr>
<td>• Can be tracked in Report Tool and the Real-Time Monitoring Dashboard</td>
<td>• Cannot be tracked in Report Tool or the Real-Time Monitoring Dashboard</td>
</tr>
</tbody>
</table>
Expressions

In this chapter...

- Using Expressions
- Expression Syntax
- Operators
- Methods
- Expression Examples

An expression is a fragment of logic that can be used in a Call Flow for two main purposes:

- To express a condition that determines which logical path to take. For example, an expression can specify the test condition in an "If : Then : Else Branch" Call Action. If the expression evaluates to true, then the first ("If") path is taken. If the expression is false, then the second ("Else") path is taken.
- To express a value that can be used for assignment. For example, the initial value of a Call Attribute can be specified using an expression that references call attached data (e.g. call.ani to store the caller's ANI) or another Call Attribute (via the attribute object).

Using Expressions

Expressions can be used as part of the definition of certain Call Actions, including:

- If:Then:Else
- Loop
- Set Call Attribute
- Select Agents With Pools And Rules

Using expressions in these Call Actions allows you to build dynamic Call Flows that vary according to the circumstances you specify.

See the Expression Examples section below

Expression Syntax

All expressions must contain a value reference and, optionally, one or more operators. A value reference is either:

- A scalar value—a number (e.g. 5 or 3.1415), a string (e.g."High" or "John Smith"), or a boolean value (true|false or 0|1).
- An object property or method reference—a reference to a property or method of one of the pre-defined Call Flow objects (i.e. attribute, call, queue, tds).
Operators

Expressions can use the following operators:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;</td>
<td>Greater than</td>
</tr>
<tr>
<td>&lt;</td>
<td>Less than</td>
</tr>
<tr>
<td>&gt;=</td>
<td>Greater than or equal to</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less than or equal to</td>
</tr>
<tr>
<td>==</td>
<td>Equal to</td>
</tr>
<tr>
<td>+</td>
<td>Addition</td>
</tr>
<tr>
<td>-</td>
<td>Subtraction</td>
</tr>
<tr>
<td>*</td>
<td>Multiplication</td>
</tr>
<tr>
<td>/</td>
<td>Division</td>
</tr>
<tr>
<td>()</td>
<td>Precedence grouping</td>
</tr>
</tbody>
</table>

Methods

Call flow expressions can use the following methods on string literals or Call Attributes of type string:

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>length</td>
<td>Determine the length of a string.</td>
</tr>
</tbody>
</table>
| indexOf(searchStr[, offset])| Determine whether a string contains another string. The optional "offset" parameter can start the search at an offset into the first string. The value returned from this function is the character index of the searchStr within the first string. A value of -1 means that the searchStr wasn't found.  
  - The indexOf method begins indexes with zero. |
| lastIndexOf(searchStr [, offset]) | Similar to indexOf(), but starts the search from the end of the searchStr.  
  - The lastIndexOf method searches from the end of the string but reports the character index counting from the beginning of the string. |
| substr(startIndex[, length]) | Extract a substring from a string. The "startIndex" parameter is the starting index. The optional "length" parameters is the number of characters to extract. If "length" is not specified, then all characters after startIndex are extracted.  
  - The substr method begins indexes with zero. |
**Expression Examples**

**Conditional Examples**

attribute.customer_value == "High"

In the example above, the object property reference is relative to the attribute object. The value of the "customer_value" attribute is compared for equality to the scalar string value "High".

call.campaign_id == 12345

In the example above, call object property campaign_id is compared to the string the number 12345.

**Property Reference Examples**

call.campaign_name

In the example above, the reference is to the "campaign_name" property of the call object. The value of this property will be assigned or used.

"John Smith"

In the example above, the scalar string value "John Smith" will be assigned or used. Note the explicit quotes to indicate that the value is a string.

**String Method Examples**

"John Smith".length

In the example above, the the scalar string value "John Smith" is evaluated for length. This will return the value 10.

"John Smith".indexOf("Smi")

In the example above, the scalar string value "John Smith" is searched for the substring "Smi". This will return the value 5, which is the position within the target string at which the substring was found.

"John Smith".indexOf("Smi", 6)

In the example above, the previous search is repeated but with a starting value (offset) of 6, causing the indexOf function to start searching that many characters into the target string (i.e., with the letter "m"). This will return the value -1, as the the substring is not found within the remaining portion of the target string (i.e., "mith").

"John Smith".lastIndexOf("o")
In the example above, we search for the substring "o", but begin the search from end of the target string. This will return the value 1.

"John Smith".substr(1)

In the example above, the scalar string value "John Smith" is parsed beginning with the character at index value 1. This will return the substring "ohn Smith."

"John Smith".substr(1, 6)

In the example above, the scalar string value "John Smith" is parsed beginning with the character at index value 1. This will return the substring "ohn Smith."
Objects

In this chapter...

- callcenter Object
- campaign Object
- call Object
- tds Object
- queue Object
- attribute Object
  - The statistic() Method

Expressions can refer to the following object properties and methods.

### callcenter Object

The callcenter object gives you information about your Contact Center instance. Currently, the callcenter object supports a single method, the statistic method. See below for information on this method.

<table>
<thead>
<tr>
<th>Table 6-1: callcenter Object Methods and Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method/Property Name</strong></td>
</tr>
<tr>
<td>statistic(statname)</td>
</tr>
<tr>
<td>Example: callcenter.statistic(&quot;repsonline&quot;)</td>
</tr>
</tbody>
</table>

### campaign Object

The campaign object gives you information about the call flow's parent Campaign. Currently, the campaign object supports a single method, the statistic method.

<table>
<thead>
<tr>
<th>Table 6-2: campaign Object Methods and Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method/Property Name</strong></td>
</tr>
<tr>
<td>statistic(statname)</td>
</tr>
<tr>
<td>Example: campaign.statistic(&quot;callsnow&quot;)</td>
</tr>
</tbody>
</table>

### call Object

The call object gives you information about the current call.

<table>
<thead>
<tr>
<th>Table 6-3: call Object Methods and Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method/Property Name</strong></td>
</tr>
</tbody>
</table>
**statistic(statname)**  
[Method] See the statistic() method section below for details.  
*Example:* `call.statistic("queuedbefore")``

<table>
<thead>
<tr>
<th>Interaction ID of the current call</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>session_id</strong></td>
</tr>
<tr>
<td><strong>ani</strong></td>
</tr>
<tr>
<td><strong>dnis</strong></td>
</tr>
<tr>
<td><strong>campaign_id</strong></td>
</tr>
<tr>
<td><strong>campaign_name</strong></td>
</tr>
<tr>
<td><strong>callcenter_id</strong></td>
</tr>
<tr>
<td><strong>program_id</strong></td>
</tr>
</tbody>
</table>

**tds Object**

The tds (Transfer Data Service) object gives you information about call attached data provided by TDS start request.

<table>
<thead>
<tr>
<th>Method/Property Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;routing data names&gt;</code></td>
<td>[Property] Property for each named value in the TDS routing data element.</td>
</tr>
<tr>
<td><code>__guid</code></td>
<td>[Property] The GUID, if any, of the inbound TDS start request.</td>
</tr>
<tr>
<td><code>__oemkey</code></td>
<td>[Property] The OEM key, if any, of the inbound TDS start request.</td>
</tr>
</tbody>
</table>

**queue Object**

The queue object gives you information about the state of the call queue. This object only exists during the Queue phase of the call flow.

<table>
<thead>
<tr>
<th>Method/Property Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| `ewt(avgcalllength)` | [Method] Returns the estimated wait time of the call in seconds. The single `avgcalllength` parameter is the expected average call length for this type of call in seconds.  
*Example:* `queue.ewt(180)` |
| `position` |
| `queue_time`  | [Property] The amount of time the call has been in queue in seconds. |
**attribute Object**

The attribute gives you information about Call Attributes, both public (Contact Center-wide) and private (call flow-specific).

<table>
<thead>
<tr>
<th>Method/Property Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;attribute name&gt;</code></td>
<td>[Property] Property for each Call Attribute. The value of the property is the current value of the attribute.</td>
</tr>
</tbody>
</table>

**The statistic() Method**

Current call and Agent statistics can be retrieved using the statistic() method of the callcenter, campaign, and call objects. The object referred to in the method invocation determines the scope of calls or Agents to be considered in calculating the statistic. Specifically:

- **callcenter**—all calls and all Agents in the Contact Center instance are considered in the calculation of the statistic.
- **campaign**—all calls currently associated with the parent Campaign are considered for call statistics. All Agents in the Contact Center instance are considered in the calculation of Agent statistics.
- **call**—all calls currently associated with the parent Campaign that are not the current call are considered for call statistics. Prior to Agent selection, all Agents in the Contact Center instance are considered in the calculation of Agent statistics. After Agent selection, only the Agents selected are considered for calculation of Agent statistics.

The statistics currently supported are:

- **repsonline**—number of Agents currently online.
- **repsavailable**—number of Agents currently in an available state (i.e., in an available work state, not on call).
- **callsnow**—number of current active calls.
- **queuednow**—number of currently queued calls.
- **callsbefore**—number of active calls that arrived prior to the current call (only for calls.statistic).
- **queuebefore**—number of queued calls that arrived prior to the current call (only for calls.statistic).
- **queuedepth**—percentage of calls in queue relative to Agents online (only for callcenter.statistic or call.statistic after Agent selection).
Versions

A single Call Flow can have multiple versions. This allows you to test and fine tune your Call Flows while preserving previous iterations of your work.

You can configure the Call Flow’s parent Campaign to use a specific Call Flow version, known as a "tag." A Call Flow based Campaign can point to one of three tags:

- **Production**—"Production" is a special tag you can give to a Call Flow version. You can configure the Call Flow’s parent Campaign to always use the Production version of this Flow to handle calls to this Campaign. You can move the production tag to any version you like at any time.
- **Latest Version**—when you select the latest version tag, whatever version of the specified Call Flow that has been most recently checked in will be used to handle calls to this Campaign.
- **Specific Version**—select a specific version of the Call Flow to handle calls to this Campaign. This version will always be used until changed by you (or another Contact Center Administrator).
View vs. Edit vs. Check Out

The Call Flow list page gives you three ways to interact with an existing Call Flow:

- You can view any Call Flow in your Contact Center.
- You can edit a Call Flow that has been checked in.
- You can continue modifying a Call Flow you have previously checked out and saved without checking it back in.

**View**

When you view a Call Flow, you can see all of the Flow's details but you cannot make changes (in other words, the Flow is "read only"). Another author can also view that Flow. You can switch to edit mode while viewing the Call Flow, unless another author starts editing it first.

**Edit**

When you edit a Call Flow, other authors will see that Flow as being "Checked Out." Other authors will not be able to edit that Flow until you check it in. This lets you work on a Flow without having your work overwritten by another author.

**Checked Out**

When a Call Flow's Action field contains a Checked Out link, this means you have this Flow checked out and can continue to edit it. When the Action field contains the words "Checked Out" but not a link, this means another author has checked out the Flow. You cannot edit it until that author has checked it in again.
**Feature Tour**

**Call Flow List Page**

In this chapter...

- Call Flow List Page Tour
- Call Flow List Page Fields

![Figure 9-1: Routing > Call Flow Menu](image)

The Call Flow list page lets you access all your existing Call Flows and create new ones.

To access the Call Flow list page:

- Select the Routing > Call Flows menu.

**Call Flow List Page Tour**

![Figure 9-2: Call Flow List Page](image)

- CREATE NEW CALL FLOW—Click this button to begin creating a new Call Flow.
• Search—By default, the Call Flow list page shows all of your Flow. If there are more Flows than can be easily displayed, you can filter the list using the search box. The Clear Search button restores the default display.
• Show retired Call Flows?—Check this to include Flows marked as retired in the list.
• Show ___ results per page—Use this to adjust the number of Call Flows displayed per page. If more results exist than will fit on the page, use the pagination controls to see additional pages.
• Actions—Use the links to view, edit, check out or copy a Call Flow.

Call Flow List Page Fields

<table>
<thead>
<tr>
<th>Table 9-1: Call Flow List Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
</tr>
<tr>
<td>#</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Last Update</td>
</tr>
<tr>
<td>Actions</td>
</tr>
</tbody>
</table>
  • View—lets you view the Call Flow in read only mode.  
  • Edit—checks the Call Flow out, allowing you to edit it.  
  • Copy—lets you create a copy of the latest checked in version of the Call Flow.  
  • Checked Out—indicates the Call Flow is currently checked out. If this is a link, you are the author who checked it out. Click this link to continue editing.  
  • Mouse over the Checked Out text to see who the current author is. |
Call Flow Designer

The Call Flow Designer lets authors create, share and manage Call Flows. Here are the key features and benefits of the Call Flow Designer:

Key Concepts

- Create sophisticated Call Flows without programming.
- Drag and drop Call Actions.
- Support for conditional branching and evaluation of programmatic expressions.
- Store and manipulate call related data using Call Attributes.
- Support for versions, check in, check out of Call Flows.
- Automated validation of Call Actions.
- Step by step logging of Call Flow activity during live calls.

To access the Call Flow Designer:

- Select the Routing > Call Flows menu.
- Create a new Call Flow, or view or edit an existing Flow.

Call Flow Designer Tour

![Call Flow Designer](image)

Figure 10-1: Call Flow Designer
The Call Flow Designer page is made up of four main areas:

- The Details section—shows information about the current version of the Flow.
- The Call Flow tab—the main Call Flow design area, containing the Call Actions palette, call phase tabs and Call Attributes tab.
- The Versions tab—view and manage all versions of this Flow.
- The Logs tab—view details of the last 10 calls handled by this Flow today.
Call Flow Details

The top of the Call Flow Designer page displays the Call Flow's basic details:

- Call flow name—the user supplied name
- Version—the current version
- Checked in status—whether the Call Flow is currently checked in or checked out
- Check In / Check Out / Undo Check Out / Switch to Edit button—this button varies depending on what actions are available to you:
  - If you have checked out the flow, you can check it in
  - If you are viewing a checked in flow, you can check it out
  - If you want to abandon your changes since you checked out the flow, you can undo the check out
  - If you are viewing a checked out flow, you can switch to edit mode

To display advanced details, click the expand/collapse icon:

![ACME Widgets - CS Latest version Checked Out View only mode Switch to Edit](image)

Click to expand/collapse Call Flow details

Figure 11-1: Call Flow Details

This will show you the following fields:

- Description—the user supplied description
- Status—specify whether the Call Flow is "Active" or "Retired"
- Created—shows who created the flow and when they created it
- Last modified—shows who last modified the flow and when they modified it
Call Flow Tab

The Call Flow tab is where you build your call flows. It consists of the Call Actions palette, the Call Phase tabs and the Call Attributes tab.

![Call Flow Tab](image)

Figure 12-1: Call Flow Tab

Call Actions Palette

The Call Actions palette contains all the call actions you can implement in your call flow: they let you do things like play audio, collect DTMF, find an Agent, etc. The Call Actions palette occupies the left hand side of the Call Flow Designer. To use the Call Actions palette, click and drag the selected action to the call phase target area.

Call Phase Tabs

The call phase tabs let you define the caller's experience during different parts of the call by inserting call actions or setting configuration options for each phase. Phases and actions are sequential: i.e., all the actions in the Arrival phase will be evaluated and possibly executed in the order they appear, followed by the actions in the Queue phase.
Call Actions Palette

In this chapter...

- About the Call Actions Palette
- Agent Selection and Call Priority Actions
- Audio Actions
- Call Control Actions
- Data Actions
- Flow Control Actions

About the Call Actions Palette

![Call Actions Palette]

Click a category to expand it

Figure 13-1: Call Action Categories

Call actions are grouped into categories in the Call Actions palette. To place a call action in your Call Flow:

1. Expand or collapse a category by clicking on it.
2. Select the Call Action you want to use in your Flow.
3. Drag the Call Action to the action target area in the currently selected Call Phase tab.
4. Configure the Call Action options as desired.

You can rearrange the order of the actions by dragging them to new positions in the current phase.

You must be editing the Call Flow to drag an action.

Call actions can only be applied to the Arrival and Queue phases. The On Call and Post Call phases are controlled via configuration fields.

You cannot move an action from one phase to another phase; you must drag a new instance of the call action into place in the desired phase.
Agent Selection and Call Priority Actions

These call actions select Agents and prioritize the call.

<table>
<thead>
<tr>
<th>Table 13-1: Selection and Priority Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action Name</strong></td>
</tr>
<tr>
<td>Prioritize Calls</td>
</tr>
<tr>
<td>Select an Individual Agent</td>
</tr>
<tr>
<td>Select Agents with Pools</td>
</tr>
<tr>
<td>Select Agents with Pools and Rules</td>
</tr>
</tbody>
</table>

Audio Actions

These call actions play audio to the caller.

<table>
<thead>
<tr>
<th>Table 13-2: Audio Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action Name</strong></td>
</tr>
<tr>
<td>Play Audio</td>
</tr>
<tr>
<td>Play Audio Loop</td>
</tr>
<tr>
<td>Play Live Announcement</td>
</tr>
<tr>
<td>Play Estimated Wait Time</td>
</tr>
<tr>
<td>Play Phone Rings</td>
</tr>
<tr>
<td>Offer Post Call Survey</td>
</tr>
<tr>
<td>Suppress Post Call Survey</td>
</tr>
</tbody>
</table>
Call Control Actions

These call actions define transfer and call back options.

<table>
<thead>
<tr>
<th>Table 13-3: Call Control Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action Name</strong></td>
</tr>
<tr>
<td>Hang up on Caller</td>
</tr>
<tr>
<td>Offer Call Back with Voicemail</td>
</tr>
<tr>
<td>Transfer to Campaign</td>
</tr>
<tr>
<td>Transfer To Number</td>
</tr>
</tbody>
</table>

Data Actions

These call actions set call attributes and collect data from the caller or from external data sources.

<table>
<thead>
<tr>
<th>Table 13-4: Data Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action Name</strong></td>
</tr>
<tr>
<td>Collect Digits</td>
</tr>
<tr>
<td>Data Exchange</td>
</tr>
<tr>
<td>Set Call Attribute</td>
</tr>
</tbody>
</table>

Flow Control Actions

These call actions specify branching, looping and menus.

<table>
<thead>
<tr>
<th>Table 13-5: Flow Control Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action Name</strong></td>
</tr>
<tr>
<td>Branch on Call Attribute</td>
</tr>
<tr>
<td>Check Business Hours</td>
</tr>
<tr>
<td>If : Then : Else Branch</td>
</tr>
<tr>
<td>Jump to End of Phase</td>
</tr>
<tr>
<td>Loop</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Menu</td>
</tr>
</tbody>
</table>

*TIP:* It's a good idea to document your call actions. Mouse over the area next to the clipboard icon at the top of each call action to insert a comment.
Call Action Validation

The Call Flow Designer automatically validates each Call Action you add to your Call Flow. Validation looks for issues such as the following:

- Missing required values
- Missing audio clips
- Invalid data formats (e.g. malformed phone numbers or URLs)
- Invalid or empty expressions

Validation issues are communicated to you in four ways:

- First, the total number of issues found in your Call Flow is displayed above the call phase tabs. Click the Hide/Show Details button to toggle the display of validation issue details in your Flow.
- Second, the number of validation issues in the Arrival and Queue phases is displayed in front of the phase tab label.
- Third, each Call Action that contains a validation error is noted with a yellow caution icon.
- Finally, the specific validation issue is surrounded with a pink border and an explanatory message appears in red.

![Image of Call Flow with Validation Issues Displayed](image)

Figure 14-1: Call Flow with Validation Issues Displayed

**NOTE:** The presence of validation issues does not prevent you from saving or checking in your Call Flow. Be sure to resolve issues that could prevent the proper functioning of your Flow before checking in.
Call Phase Tabs

The Arrival and Queue phases contain action target areas. When you drag a Call Action over the call phase tab, the action target area will change color and show you a message, indicating the position this action will occupy in the Call Flow. You can move a Call Action to a new position in the currently displayed tab at any time by clicking and dragging.

![Call Phase Tabs](image)

Figure 15-1: Call Phase Tabs

To use the call phase tabs:

1. Click a phase tab to select it.
2. For the Arrival and Queue phases:
   1. Select a Call Action from the palette
   2. Drag it to the desired position in the phase.
3. For the On Call and Post Call phases:
   1. The configuration options in these phases control things like:
      - Speed dial and transfer options
      - Displayed ANI
      - Screen pop
      - Hold music
      - Call transition and wrap up time
Versions Tab

The Versions tab lists all the checked in versions of the current call flow. This page shows you the following information:

- **Latest**—shows the most recent checked in version.
- **Production**—shows the version currently tagged as "Production," if any.
- **Check In Date**—shows the date each version was checked in, or the string "Checked Out" if the version is currently checked out.
- **Comments**—shows the user supplied comments.
- **Edits Made By**—shows who edited the version.
- **Tag**—shows the version tag, if any, or the string, "In Progress" if the version is currently being edited.

Only versions that have been checked in appear in the list. If you are editing a new version, that will not show up until you check it in.

**Actions**

You can perform the following version related tasks on this page:

- **View**—load the selected version in "read only" mode.
- **Copy**—create a copy of the selected version.
- **Tag New Production Version**—set the "Production" tag to the selected version.
- **Revert**—undo any changes you've made since your last check in.

*NOTE: Be careful! You cannot recover any changes lost when you revert to a previous version.*
The Logs tab shows you are a record of live calls handled by the current Call Flow. You can see basic facts about the calls, as well as the step by step progress of each call through the Flow.

NOTE: The Logs tab displays the last 10 calls taken by the selected Campaign for the current day. I.e., as more than 10 calls come in, older calls are removed from the list when the page is refreshed, and only calls taken in the current day are shown.

The Logs page shows the following basic facts about your calls:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caller ANI</td>
<td>The caller’s phone number.</td>
</tr>
<tr>
<td>Session ID</td>
<td>The unique identifier for this call leg.</td>
</tr>
<tr>
<td>Call Duration</td>
<td>The length of the call.</td>
</tr>
<tr>
<td>Call Start Time</td>
<td>The time the call began.</td>
</tr>
<tr>
<td></td>
<td>• Log times are in Eastern (America/New York) timezone.</td>
</tr>
<tr>
<td>Actions</td>
<td>View—view the Call Action details for this call.</td>
</tr>
</tbody>
</table>
Understanding the Call Action Details

Clicking on the View link for a selected call displays the Call Action details for that call. This shows you how the call progressed through your Call Flow, from the beginning of the Arrival phase, to the end of the Queue phase. While the specific items shown will vary depending on your Flow and the caller's actions, Call Action detail logs typically include the following entries:

- **Session ID/Interaction ID**—in the LiveOps Cloud Contact Center Platform, calls consist of multiple segments or "legs." Individual segments are identified by their Segment ID (a.k.a. Session ID). The platform also assigns an Interaction ID that identifies the entire call (the combination of all call legs). You can click the Interaction ID link to see additional segments for this call, if any. Typically, additional call segments are created by a call transfer.
- **Call Flow start**—the date and time Call Flow execution began.
- **Phase start**—the date and time each phase began.
- **Call Action execution start**—each Action encountered by the call is identified by type, along with a system supplied label and, if present, the user supplied label. Additional information may also be logged, depending on the Call Action.
- **Attribute initialization**—Each Call Attribute encountered by the call is identified, along with its initial value.
- **Call Action/Phase/Flow execution end**—the date and time execution of these items ended.
- **Errors**—any errors generated by this Flow are shown. Non-fatal errors appear in purple, while failures that cause the Call Flow to end prematurely appear in magenta.

**NOTE:** Only the Arrival and Queue phases are shown in the logs, as Call Actions can only be applied to these phases.

**NOTE:** If there is an error initializing the Call Attribute, its default value, if any, is used.

**NOTE:** If the Log call attribute usage option is not checked for this Call Attribute, you will not see the actual value it contains within this Flow. Instead, you will see "(value excluded from log)." This helps to protect sensitive data.
How To

Check In a Call Flow

When you check in a Call Flow:

- A new version number is generated.
- All of your saved changes become permanent in that version.
- That Call Flow becomes available for other authors to view or edit.

In addition, if the parent Campaign is configured to use the "latest version," this new checked in version will be used.

To check in a Call Flow:

1. Click the Check In button in the Call Flow detail section. (You must have the Call Flow checked out and in edit mode to see this button.)
2. You will see the "Checking in Call Flow" dialog.
3. Verify that the version information shown is correct, then click Next.
4. If you want to tag this version as the Production version, check the Tag as Production version checkbox.
5. Click Next.
6. Add comments about your check in.
7. Click Finish Check In.
Check Out a Call Flow

Before you can edit an existing Call Flow, you must check it out. When you check out a Call Flow:

- That Call Flow becomes editable for you.
- Other authors can only view the Call Flow.
- The Call Flow Designer creates a new version, incrementing the latest version number by one.

To check out a Call Flow:

1. Select the Routing > Call Flows menu.
2. Search or browse to find the Call Flow you wish to check out.
3. Click the Edit link in the Actions column.

**NOTE:** If there is no Edit link, then you cannot check out the Call Flow. If the Actions column for that Call Flow says "Checked Out" and is not a link, then another author has checked out the Flow. If "Checked Out" is a link, then you already have the Call Flow checked out.
Configure On Call & Post Call Options

The On Call and Post Call phase experience is controlled via configuration fields (rather than Call Actions).

To configure these phases:

1. Select the Routing > Call Flows menu.
2. Search or browse for the existing Call Flow you wish to configure and click its Edit link in the Actions column. Or create a new Call Flow.
   - (For a Call Flow you have already checked out, click the Checked Out link instead.)
3. Click the On Call or Post Call phase tab.
4. Configure the option fields as desired. See the links below for explanations of the fields.

On Call Options List

The On Call and Post Call phase experience is controlled via configuration fields (rather than call actions). Table 20-1 lists the On Call phase fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max number rings to agent phone</td>
<td>This setting controls how long a call is offered to an Agent before rolling over to the next available Agent. Agents who fail to answer a call within the specified will be paused (unable to receive additional calls until they manually unpause).</td>
</tr>
<tr>
<td>Speed Dial Transfer</td>
<td>Specify the default speed dial list to display in the Agents' phone panel. If left blank, Agents will still have access to all the available speed dial lists, there simply will not be a default list displayed.</td>
</tr>
<tr>
<td>Arbitrarily Number Transfer via Campaign</td>
<td>If specified, this allows the Agent to transfer the call to an arbitrary dialed number. The Campaign specified in this parameter is used for reporting purposes. If no Campaign is specified, the Agent can only choose Speed Dial transfer points (if available); they may not enter an arbitrary transfer number.</td>
</tr>
<tr>
<td>Caller ANI Displayed to Agents</td>
<td>Specify the telephone number (ANI) of the calling party to display to Agents. Options:</td>
</tr>
<tr>
<td></td>
<td>• Caller ANI—display the caller's telephone number via the Automatic Number Identification service.</td>
</tr>
<tr>
<td></td>
<td>• Custom ANI—display the telephone number you enter here.</td>
</tr>
</tbody>
</table>
Screen Pop
The screen that your Agents will see on their computers when they receive a call from Contact Center. Contact Center can "pop" a script or information screen to your Agents when they answer a call. Use this field to specify the URL of that screen. If you are not using on screen scripting (or are using the LiveOps Offer system) you can leave this field blank.

Hold Music
Select the audio from your library you wish to play to callers while they are on hold.

Post Call Options List
The On Call and Post Call phase experience is controlled via configuration fields (rather than call actions). Table 20-2 lists the Post Call phase fields.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call Transition Time</td>
<td>The minimum time, in seconds, an Agent will wait between ending one call and beginning another for this flow.</td>
</tr>
<tr>
<td></td>
<td>This setting determines the amount of time after a caller hangs up that Contact Center waits before actively hanging up on the Agent leg. Its purpose is to ensure that Contact Center doesn't deliver a call to an Agent before their device (telephone) is ready to accept it. In determining when to send the Agent another call, Contact Center considers three possible scenarios:</td>
</tr>
<tr>
<td></td>
<td>• If the Agent is going into post call wrap up mode, Contact Center hangs up on the Agent leg immediately. In this case, the next call will be delivered to an Agent only after they leave wrap up.</td>
</tr>
<tr>
<td></td>
<td>• If the Agent is not going into post call wrap up mode and hangs up their device, Contact Center will deliver the next call only after it receives the Agent hang-up notification. This ensures there is enough time for the Agent's device (and the phone network) to reset and be ready for the next call.</td>
</tr>
<tr>
<td></td>
<td>• If the Agent is not going into post call wrap up mode and does not hang up their device, the Call Transition Time is the amount of time Contact Center will wait before actively hanging up on the Agent and making them available for the next call.</td>
</tr>
<tr>
<td>Wrap Up Time</td>
<td>Agents are permitted a certain amount of transition time after hanging up the phone before Contact Center sends them a new call. This is the Call Transition Time setting. You can allow Agents extra Wrap Up time for record keeping or other additional post call work. There are two modes of wrap up time: manual wrap up and auto wrap up.</td>
</tr>
<tr>
<td></td>
<td><strong>Manual Wrap Up</strong>—In this mode, Agents must click a Wrap Up button in their Phone Panel to initiate wrap up time after they hang up.</td>
</tr>
</tbody>
</table>
**Auto Wrap Up**—In this mode, Agents are automatically put into wrap up mode after they have been on the call for a specified amount of time (the target wrap up time).

After reaching the maximum wrap up time, Agents will be made available for calls again.

Options:

- Allow Agent to do after call wrap up—enables manual wrap up mode.
- Target wrap up time—The length of wrap up time, in seconds, you want your Agents to aim for. This value must be greater than zero and less than "Maximum wrap up time."
- Maximum wrap up time—The maximum amount of after call wrap up time, in seconds. When an Agent exceeds this time, their wrap up period ends and they are placed back in the pool of available Agents.
- Enable auto wrap up—Automatically place Agents in wrap up mode after their call has exceeded the minimum call length.
- Minimum call length for auto wrap up—The minimum length, in seconds, a call must be before automatically placing an Agent into wrap up mode. This value must be greater than or equal to zero.
Configure a Call Flow-based Campaign

Every Call Flow is associated with one or more parent Campaigns. To configure a Call Flow based Campaign:

1. Select the Routing > Campaigns menu.
2. Locate the parent Campaign for your Call Flow.
   - A Campaign must be declared to be Call Flow Based when it is first created. You cannot switch a Standard IVR Campaign to Call Flow Based. If necessary, create a new Campaign and set the Routing Class field to Call Flow Based.
3. Set the Version field to the Call Flow version tag you want to use.
4. Click Save Changes.
Copy a Call Flow

There are two ways to copy a Call Flow:

- Using the Copy link on the Call Flow list page—this creates an exact duplicate based on the latest checked in version.
- Using the Copy link on the Versions tab for a specific Call Flow—this creates an exact duplicate based on the selected version.

To copy the latest checked in version of a Call Flow:

1. Select the Routing > Call Flows menu.
2. Locate the Call Flow to copy by browsing or searching.
3. Click the Copy link in the Actions column.

To copy a specific version of a Call Flow:

1. Edit or Check Out the Call Flow.
2. Click the Versions tab.
3. Click the Copy link in the Actions column of the version you wish to copy.

In either case, give the copy of the flow a new name and description or accept the default values.

NOTE: A Call Flow must be checked in before you can copy it. Flows that are currently checked out or being edited will not have a Copy link.
Create Call Attributes

There are two kinds of Call Attributes: **inherited Call Attributes**, which can be used in any Call Flow, and **Call Flow Call Attributes**, which can be used only in the Call Flow for which they were created. You can think of inherited Call Attributes as a kind of global or shared variable, while Call Flow Call Attributes are private or local variables.

**To create a private Call Flow Call Attribute:**

1. Create or edit a call flow.
2. Click the Call Attributes tab.
3. Click NEW ATTRIBUTE.

**To create a shared inherited Call Attribute:**

1. Select the Routing > Call Attributes menu.
2. Click CREATE NEW CALL ATTRIBUTE.

Table 23-1 describes the Call Attributes configuration options:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute identifier</td>
<td>A string that uniquely identifies this Call Attribute. *NOTE: The attribute identifier can only contain letters, numbers and the underscore character (_).</td>
</tr>
<tr>
<td>Display label</td>
<td>A user friendly label to be displayed in Report Tool. This field only appears for inherited Call Attributes.</td>
</tr>
<tr>
<td>Data type</td>
<td>The kind of data this attribute can hold. Possible choices are:</td>
</tr>
<tr>
<td></td>
<td>• Boolean—a logical (true/false) value</td>
</tr>
<tr>
<td></td>
<td>• Enumeration—a list of possible string values</td>
</tr>
<tr>
<td></td>
<td>• Integer—a numeric value</td>
</tr>
<tr>
<td></td>
<td>• String—any string (letters, numbers, punctuation) value</td>
</tr>
<tr>
<td>Valid range</td>
<td>(Optional) For integer-type attributes, specify the minimum and maximum values allowed.</td>
</tr>
<tr>
<td>Description</td>
<td>(Optional) This appears in the list of Call Attributes when viewing/editing a Call Flow (in the Call Attribute tab).</td>
</tr>
<tr>
<td>Initial value</td>
<td>(Optional) Specify an initial value for this Call Attribute.</td>
</tr>
<tr>
<td></td>
<td>An expression (not a scalar value) used to initialize this Call Attribute. This value overrides any Default value. If the Initial value is not specified, or if the expression used for initialization fails, the Default value will be used.</td>
</tr>
</tbody>
</table>
| Default value                                                                 | (Optional) Specify a default value for this Call Attribute.  
|                                                                             | A scalar value (not an expression) used to initialize the Call Attribute if no Initial value is specified or if the initialization expression fails. The Default value will also be used if a later assignment to a Call Attribute fails (e.g. if the assigned value is out of the specified numeric range or is not in the set of enumerated strings). |
| Log Call Attribute usage                                                   | If checked, the values set for this Call Attribute will be logged in both the Call Actions detail logs and in Report Tool reports and Real Time Monitoring dashboards. If unchecked, the values set during the Call Flow will not be logged.  
|                                                                             | **TIP:** Leave this field unchecked if the Call Attribute will be used to store sensitive data.  
|                                                                             | **NOTE:** This field only appears for inherited Call Attributes. Call Flow Call Attributes will always be logged. |
| Use in historical reports                                                 | If checked, this Call Attribute will be available in Report Tool (specifically the Call Interaction and Call Segment reports) for summary groupings and per-call detail.  
|                                                                             | **TIP:** This field only appears for inherited Call Attributes. Call Flow Call Attributes will always be available for reporting. |
| Use in real-time dashboard                                                | If checked, this Call Attribute can be used as a Dimension in the Real Time Monitoring Dashboard.  
|                                                                             | **TIP:** This field only appears for inherited Call Attributes. Call Flow Call Attributes will always be available for Real Time Monitoring Dashboards. |
| Use to present a screen pop                                               | If checked, this Call Attribute and its current value will be provided as parameters to the Agent screen pop URL. |
Create a New Call Flow

To create a new Call Flow:

1. Select the Routing > Call Flows menu.
2. Click CREATE NEW CALL FLOW.
3. Give your Call Flow a unique Name.
4. Give your Call Flow a Description.
5. Click SAVE CALL FLOW.

Once you have saved your Flow, you will see the Call Flow Designer and begin creating your Call Flow.
Edit an Existing Call Flow

When you edit a Call Flow, other authors will see that Flow as being "Checked Out." Other authors will not be able to edit that Flow until you check it in. This lets you work on a Flow without having your work overwritten by another author.

To edit an existing Call Flow:

1. Select the Routing > Call Flows menu.
2. Search or browse to find the Call Flow you wish to check out.
3. Click the Edit link in the Actions column.

NOTE: If there is no Edit link, then you cannot check out the Call Flow. If the Actions column for that Call Flow says "Checked Out" and is not a link, then another author has checked out the Flow. If "Checked Out" is a link, then you already have the Call Flow checked out.
Exchange Data with External Sources

The **Data Exchange call action** is used to perform a "data dip:" accessing data from (or sending data to) an external source. This call action defines input and output parameters, as well as lets you play audio to the caller while the data exchange is processing and to branch your call flow if the exchange fails. Input parameters are used to send data to the data source. These can be Call Attributes or calculated expressions. The data source returns data to the call flow via output parameters, which you can assign to Call Attributes.

**To Use the Data Exchange Call Action:**

1. Edit or create a call flow.
2. Expand the Data Call Actions list.
3. Click and drag the Data Exchange Call Action to the desired action target area. (Data Exchange can be performed in the Arrival and Queue phases.)
4. Select the Data Source.
5. Specify a value for the Timeout field.
6. Select the Audio to play while performing the Data Exchange.
7. Specify the Inputs and Outputs.
8. Define any Call Actions to perform for the If the Data Exchange fails field.
Find and Fix Validation Issues

The Call Flow Designer automatically validates each Call Action you add to your Call Flow and reports the number of validation issues found above the call phase tabs.

To find and fix validation issues:

1. Make sure the Hide/Show Details button is toggled to the Show Details.
2. Note the number of validation issues found in the Arrival and Queue call phases: these numbers are displayed in front of the phase tab label.
3. For each phase containing issues, locate each Call Action that is noted with a yellow caution icon: that Action contains a validation issue.
4. Expand the Call Action by clicking the + sign to the left of the Action title (or click Expand All in the call phase title bar). This will display the specific validation error message.
5. Enter the information requested or make other changes as indicated by the validation message.

TIP: If you have a large Call Flow, clicking the Expand all link will allow you to quickly identify all of the validation issues in the current call phase.

TIP: As you resolve each validation issue, the total number of issues displayed will decrease.
Revert to a Previous Version

When you revert to a different version of a Call Flow, you replace the currently checked out version with a different version. If you’ve made changes to the current version but have not committed them (checked in), those changes are lost forever.

*TIP:* When you revert, you abandon all your uncommitted changes. This cannot be undone.

*TIP:* Remember: Save is not the same as Check In. Even saved changes will be lost if you revert to a different version.

**To revert to a different version:**

1. You must be editing the Flow you want to revert.
2. Click the Revert... button at the bottom of the page.
3. Select the version to which you want to revert. You have three options:
   1. Your last saved version—the date and time will be shown.
   2. The latest checked in version—the version number will be shown.
   3. A specific version—choose the version from the drop down list. This option will show up if there is more than one version to from which to choose.
4. Select the option you want, then click Revert.

The version you have selected will replace the version you have currently been editing.
Save Changes

When you save changes to a Call Flow, you can safely navigate away from the Call Flow Designer or close your browser. Your edits will be preserved.

*TIP: Saving is *not* the same as checking in:

*TIP: When you save a Call Flow, only you can see those changes. The Call Flow still appears as checked out to other authors.

*TIP: The saved version of the Call Flow cannot be used to handle calls.

*TIP: To commit your changed Call Flow permanently, allow other authors to edit it and to use it to handle telephone calls, you must check it in.

**To save a Call Flow:**

1. You must be editing the Flow you want to save.
2. Click the SAVE CHANGES button at the bottom of the page.
3. You will see the Last Saved... information appear below the button.
Tag a Call Flow as Production

**Production** is a special tag you can give to a Call Flow version. You can configure the Call Flow's parent Campaign to always use the Production version of this Flow to handle calls to this Campaign. You can move the production tag to any version you like at any time.

**To tag a Call Flow as Production:**

1. Select the Routing > Call Flows menu.
2. Search or browse to find the Call Flow you wish to tag.
3. Click the Edit link in the Actions column.

   *NOTE: If there is no Edit link, then you cannot check out the Call Flow. If the Actions column for that Call Flow says "Checked Out" and is not a link, then another author has checked out the Flow. If "Checked Out" is a link, then you already have the Call Flow checked out.*

4. Click the Check In button in the Call Flow details section.
5. You will see the "Checking in Call Flow" dialog.
6. Verify that the version information shown is correct, then click Next.
7. Check the Tag as Production version checkbox.
8. Click Next.
9. Add comments about your check in.
10. Click Finish Check In.

*TIP: You can also tag the current version you are editing by clicking the Tag New Production Version button on the Call Flow's Version tab.*

If the parent Campaign is configured to use the Production version of this Call Flow to handle calls, this version will now be used.
Undo a Check Out

When you undo a check out, any changes you have made to the Call Flow since you checked it out are discarded. That Call Flow becomes available for check out by other authors.

*TIP: When you undo a check out, you abandon all your uncommitted changes. This cannot be undone.*

*TIP: Remember: Save is not the same as Check In. Even saved changes will be lost if you undo a check out.*

**To undo a check out:**

1. You must be editing the Flow you want to undo.
2. Click the Undo Check Out button in the Call Flow details section.
3. You will see the "Undo Check Out" dialog confirming your action.
4. Click Undo Check Out.

The Call Flow you have been editing will be discarded and you will be returned to the Call Flow List page.
View a Call Flow (Read-only mode)

When you view a Call Flow, you can see all of the Flow's details but you cannot make changes (in other words, the Flow is "read only"). Another author can also view that Flow. You can switch to edit mode while viewing the Call Flow, unless another author starts editing it first.

**To view a Call Flow:**

1. Select the Routing > Call Flows menu.
2. Search or browse to find the Call Flow you wish to view.
3. Click the View link in the Actions column.

The selected Call Flow will appear in view only mode. To check out the Call Flow so you can edit it, click the Switch to Edit button in the Call Flow details section.
View the Call Log

The Logs tab shows you a record of live calls handled by the current Call Flow. You can see basic facts about the calls, as well as the step by step progress of each call through the Flow.

To access the Logs tab:

1. Select the Routing > Call Flows menu.
2. Search or browse to find the Call Flow you wish to view.
3. Click the View link in the Actions column.
4. Click the Logs tab.
5. Use the Campaign drop down menu to filter the call list by the parent Campaign.

NOTE: The Logs tab displays the last 10 calls taken by the selected Campaign for the current day. I.e., as more than 10 calls come in, older calls are removed from the list when the page is refreshed, and only calls taken in the current day are shown.
This chapter presents an example Call Flow: a phone-based weather report. This example uses the Data Exchange Call Action to send the caller's zip code to a weather service data source. The data source then returns a simple forecast string to the Call Flow. Using this forecast string as the test condition, the Call Flow will branch to the play the correct audio to the caller. To keep this example simple, we will assume there are only 4 weather conditions possible:

- Fair
- Rain
- Snow
- Extreme

If the weather service returns any other value, we will assume the weather is extreme. This example is too simple to be a successful real-world application, but it shows how easy it is to integrate the LiveOps Cloud Contact Center Platform with external data sources. Creating this application can be done in three basic steps:

1. Create the Audio Assets:
   1. Record and upload audio prompts for all the possible caller interactions.
2. Create the Data Source:
   1. Specify the URL, path and query string to the weather service site.
   2. Specify the input and output parameters.
3. Create the Call Flow:
   1. Create Call Attributes to hold the input and output parameters.
   2. Collect the caller’s zip code and store it as the input Call Attribute.
   3. Send the input to the data source.
   4. Store the returned data as the output Call Attribute.
   5. Branch the Call Flow on the output; play appropriate audio for each branch.
   6. End the call.
NOTE: In the steps below, you will be instructed to add Call Actions to the Call Flow. You do this by selecting the desired Action from the palette on the left and dragging it into position in the Arrival phase target area. Be sure to place each action in the correct position in the flow (Call Actions are executed in the order they appear in the flow). In the documentation below, Primary Call Actions are those that are visible when all Actions are collapsed (click the Collapse All link). Secondary Call Actions are those that appear when a Primary Action is expanded (click the + or Expand All link).

TIP: Example screen shots are provided below. Click on an image to see a full sized version.

**Step One: Create the Audio Assets**

1. Select the Configure > Call Assets > Audio Library menu.
2. Add a new audio catalog (or select an existing catalog).
3. Create audio clips for the following prompts:
   1. Please enter your zip or postal code.
   2. The weather forecast in your location will be fair.
   3. The weather forecast in your location calls for rain.
   4. The weather forecast in your location calls for snow.
   5. The weather forecast in your location will be really scary.
   6. Thank you for calling. Goodbye.
   7. I didn't understand your input. Please reenter.
   8. I'm sorry, I'm having trouble hearing you. Please try your call again. Goodbye.
   9. I'm sorry, I'm having trouble fetching your report. Please try your call again. Goodbye.

![Figure 35-2: Audio Library](image-url)
Step Two: Create the Data Source

1. Select the Configure > Call Assets > Data Sources menu.
2. Click the CREATE NEW DATA SOURCE button. Configure the following fields as shown:
   1. Name: Get Weather Report
   2. Data Source Type: REST
   3. Data Source Action: GET
   4. Status: Enabled
3. Click the SAVE DATA SOURCE button. Configure the new fields that appear:
   1. Credentials: None
   2. Output Type: XML
   4. Path String: /weather/local/[zip]
   5. Query String: cc=*&dayf=5&link=xoap&prod=xoap&par=1237474700&key=6768f55af7e777a9

4. Click the Input tab, then click +. This brings up the New Input Parameter dialog. Configure the fields as follows:
Figure 35-5: Edit Input Parameter

1. Name: zip
2. Transformation Type: Insert as is
3. Click OK.

7. Click the Output tab, then click +. This brings up the New Output Parameter dialog. Configure the fields as follows:

Figure 35-6: Edit Output Parameter

1. Name: WeatherType
2. Locator Type: Xpath
3. Locator Expression: weather/cc/t
4. Click OK

8. Click the SAVE DATA SOURCE button.
9. Test the data source connection by clicking the Test Connection... button.

![Test Data Source Connection](image)

Figure 35-7: Test Data Source Connection

1. Enter your zip code.
2. Click the Run button. The results dialog will appear: if your request was successful, you will see the returned data, similar to that shown in the figure below.

**Step Three: Create the Call Flow**

1. Select the Routing > Call Flows menu.
2. Click the CREATE NEW CALL FLOW button.
3. Give your Call Flow a Name, a Description and set the Status to Active.
4. Create two Call Attributes, one to hold the caller's zip code and the second to hold the forecast string:

![Create Call Attribute](image)

Figure 35-8: Create Call Flow

![Create Call Flow Attributes](image)

Figure 35-9: Create Call Attribute
1. Click the Call Attributes tab.

![Figure 35-10: Edit Call Attribute](image)

1. Click the NEW ATTRIBUTE button. Configure the fields as follows:
   1. Name: ZIPCODE
   2. Type: Integer
   3. Click the Save button.

2. Click the NEW ATTRIBUTE button. Configure the fields as follows:
   1. Name: FORECAST
   2. Type: String
   3. Click the Save button.

5. Click the Arrival tab.

6. Delete the Select Agents with Pools Call Action by clicking the X icon.

7. Add a Collect Digits Call Action (primary). Configure it as follows:

![Figure 35-11: Collect Digits Call Action](image)
1. Lead-in Audio: Please enter your zip or postal code.
2. No Input Audio: Please enter your zip or postal code.
5. Call Attribute: ZIPCODE.
6. When too many invalid attempts are made, then do:
   1. Add a Play Audio Call Action (secondary).
   1. Select the prompt for I'm sorry, I'm having trouble hearing you. Please try your call again. Goodbye.
   2. Add a Hang Up on Caller Call Action (secondary).
8. Add a Data Exchange Call Action (primary). Configure the fields as follows:

   ![Data Exchange Call Action Diagram]

   **Figure 35-12: Data Exchange Call Action**

1. Data Source: Get Weather Report
2. Click Choose Inputs:
   1. Select zip.
   2. Click the Add button.
   3. Click OK.
3. Set parameter zip to ZIPCODE.
4. Click Choose Outputs:
   1. Select WeatherType.
   2. Click the Add button.
   3. Click OK.
5. Set FORECAST to parameter WeatherType.
6. If Data Exchange fails, then do:
   1. Add a Play Audio Call Action (secondary).
   1. Select the prompt for I'm sorry, I'm having trouble fetching your report. Please try your call again. Goodbye.
2. Add a Hang Up on Caller Call Action (secondary).

7. Add a Branch on Call Attribute Call Action (primary). Configure the fields as follows:

![Figure 35-13: Branch on Call Attribute Call Action](image)

1. Choose a Call Attribute to use for this branch: FORECAST
2. Enter the value for this branch, then click Add:
   1. Enter Fair
   2. Click the Add button.
   3. Enter Rain
   4. Click the Add button.
   5. Enter Snow
   6. Click the Add button.
3. For the value Fair do:
   1. Add a Play Audio Call Action (secondary).
      1. Select the prompt for The weather forecast in your location is fair.
4. For the value Rain do:
   1. Add a Play Audio Call Action (secondary).
      1. Select the prompt for The weather forecast in your location calls for rain.
5. For the value Snow do:
   1. Add a Play Audio Call Action (secondary).
      1. Select the prompt for The weather forecast in your location calls for snow.
6. For any other value do:
   1. Add a Play Audio Call Action (secondary).
      1. Select the prompt for The weather forecast in your location will be really scary.
7. Add a Play Audio Call Action (primary)

![Figure 35-14: Play Audio Call Action](image)

1. Select the prompt for Thank you for calling. Goodbye.

8. Add a Hang Up on Caller Call Action (primary).

![Figure 35-15: Hang Up Call Action](image)

9. Click the SAVE CALL FLOW button.

To complete this example and make a test call, create an Enterprise Campaign that points to this Call Flow and make a call to that Campaign.
Call Action Descriptions

Branch On Call Attribute

Call Action: Branch on Call Attribute

Create branches in your Call Flow, based on Call Attribute values. You can create different branches for each possible Call Attribute value. You can also provide a default behavior if no matching Call Attribute value is found.

Options:

- Choose a Call Attribute—select the Call Attribute on which to branch.
- Add a branch—enter the value, which if met, will cause the Flow to take this branch.
- For value—select a Call Action to perform.

Available in Phase(s):

Arrival, Queue
Check Business Hours

Call Action:

Branch your Call Flow based on when the call arrives

Options:

- Open—specify the Call Actions to perform if the call arrives open hours
- Closed—specify the Call Actions to perform if the call arrives closed hours

Available in Phase(s):

Arrival, Queue
**Collect Digits**

**Call Action: Collect Digits**

Get input from the caller via DTMF. Store the input in a call attribute.

Options:

- Lead-in Audio—the audio clip to play requesting the caller's input.
- No Input Audio—the audio clip to play if the caller doesn't respond.
- Bad Input Audio—the audio clip to play if the caller doesn't respond.
- Number of Digits—the minimum and maximum number of digits the caller can enter. If the minimum and maximum are the same, the caller must enter that exact number of digits.
- Require a trailing # (pound) key—if checked, the caller must enter "#" to terminate DTMF entry. If left unchecked (the default), a timeout will terminate the digit collection.
- Maximum Tries—the number of attempts the caller has to enter a valid number of digits.
- Call Attribute—this is where the digits will be saved.
- When too many invalid attempts are made, then do—select a Call Action to perform if the Collect Digits action fails. You can add multiple Call Actions using the Add Another button.

Available in Phase(s):

Arrival, Queue
**Data Exchange**

**Call Action: Data Exchange**

Get information from and send information to an external data source ("data dip").

Options:

- Data Source—the pre-defined before it can be used in the Data Exchange action.
- Timeout (seconds)—the time to wait for a response from the data source before giving up.
- Audio to play while data is being exchanged—the audio clip to play while the Data Exchange action is occurring.
- Choose inputs—data to be sent to the data source. Inputs can be either:
  - Call Attribute—assign a Call Attribute to the input parameter.
  - Expression—assign an expression to the input parameter.
- Choose outputs—data received from the data source. Outputs are assigned to Call Attributes.
- If Data Exchange fails, then do—define a Call Action to perform if the timeout length is exceeded without a response from the data source, or the data source responds with a failure notification.

Available in Phase(s):

- Arrival, Queue
Hang Up On Caller

Call Action: **Hang up on Caller**

End the call without reaching an Agent.

Available in Phase(s):

Arrival, Queue
If Then Else Branch

**Call Action: If : Then : Else Branch**

Branch your Call Flow based on an expression. Drag

Options:

- If—enter an expression, which if true, will execute the first branch’s Call Action.
- Else—specify the Call Action to perform if the expression you entered is false.

Available in Phase(s):

Arrival, Queue
Jump To End Of Phase

**Call Action: Jump to End of Phase**

Ends processing of Call Actions in the Arrival phase and moves to the beginning of the Queue phase.

*NOTE: Any actions remaining in the Arrival phase are ignored.*

Available in Phase(s):

Arrival
Loop

Call Action: Loop

Execute a sequence of actions.

Options:

- Loop indefinitely—repeat the specified actions until ended by an explicit action (e.g. Jump to End of Phase, Hang Up, Transfer, etc.). In the Queue phase, the loop will terminate when the call is connected to an Agent.
- Loop while the expression ____ is true—repeat the specified actions until the expression you supply becomes true.
  - If the expression evaluates to true the first time through the loop, the loop will end immediately and the specified actions will not be executed.

Available in Phase(s):

Arrival, Queue
Menu

Call Action: Menu

Create a menu of choices for the caller by playing clips from your audio library and accepting DTMF input. You can then branch the Call Flow based on that input.

Options:

- Lead-in Audio—select the audio clip to play that introduces this menu.
- No Input Audio—select the audio clip to play if the caller does not respond within the allowed time (7 seconds).
- Bad Input Audio—select the audio clip to play if the caller does not make an acceptable response.
- Maximum Tries—the number of attempts the caller can make to enter a valid response. The default is three attempts.
- Menu Options—define the Call Actions for each valid choice the caller can make, as well as the Call Actions to take when the caller exceeds the maximum tries.
- Add Menu Option—select the menu option you want to add and click Add. Once a menu option has been used, it cannot be used again.

Available in Phase(s):

Arrival, Queue
Offer Call Back with Voicemail

**Call Action: Offer Call Back with Voicemail**

Offer the caller the option of hanging up and having an Agent call them back when available. The caller's position in the Queue is maintained. The caller can leave a message for the Agent.

**Callback Options:**

- **Region**—specify whether to apply North American Numbering Plan (NANPA) or international dialing rules for the call back. See the International Dialing section below.
- **Caller ID for Callback**—specify the caller ID to display to the caller when calling them back.
- **Maximum queue time**—specify the maximum time, in seconds, this call will remain active in the Queue. After this time expires, the call is dropped.
- **Maximum ring time**—specify the maximum amount of time, in seconds, to ring the caller. If the caller does not answer after this time, the call is dropped.
- **Block toll-free numbers**—do not accept call backs to toll-free numbers.
- **Block premium numbers**—do not accept call backs to premium numbers.
- **Allow Caller to Leave a VoiceMail**—if checked, the caller will be informed they have the option of leaving a message for the Agent that calls them back.
- **Maximum message length**—specify the maximum length, in seconds, of message the caller can leave.

**Advanced Settings:**

- **Audio Catalog**—select a different audio catalog containing the offer callback prompts. This catalog should have
- **Play Audio that Offers Caller the Callback Option**—if checked, the caller will hear audio offering the option to keep their place in the queue and receive a call from the next available Agent. If not checked, it is assumed your Flow will provide the audio portion through other Call Actions.
- **Audio file**—specify the audio file that contains the callback option announcement. You cannot change the name of the file, though if desired, you can replace the audio contained in that clip with audio of your own choosing.
- **Set Call Priority**—set call prioritization options for the callback.

*See the [Prioritize Calls] call action for descriptions of the available options.*

- **Select Agents With Pools and Rules**—specify the Agents who can handle the callback. If you do not use this option, callbacks will be handled by the same Agent Pools as other calls to this Flow.

*See the [Select Agents With Pools and Rules] call action for descriptions of the available options.*
**International Dialing**

The Region drop down list determines how call back telephone numbers are handled. When your region is set to NANPA:

- Phone numbers must be 10 digits in length.
- Toll free numbers may be blocked.
- Premium ("900") numbers may be blocked.
- The following default audio prompts are used:
  - phone-collect
  - phone-retry
  - phone-invalid

When your region is set to Other:

- Phone numbers may be up to 15 digits in length.
- Phone numbers must include the country code.
- Toll free and Premium number blocking is disabled.
- The following audio prompts are used in place of the defaults:
  - phone-collect-E164
  - phone-retry-E164
  - phone-invalid-E164

**Playing Localized Audio** You can play audio in languages other than English by selecting the desired audio catalog from the Audio Catalog drop down menu.

To create a localized audio catalog for the Call Back with Voice Mail call action, you must record the following prompts in your target language(s) and add them to the LiveOps Call Back audio catalog:

To create a localized Callback with Voicemail call action, create a new audio catalog and provide the following prompts in your desired language:

<p>| Table 44-1: Call Back with Voice Mail Audio Prompts |
|-----------------------------------------------|-------------------------------------------------|
| <strong>Audio File</strong>                                | <strong>Text</strong>                                       |
| agent-intro                                   | The caller has left a message and wants to be called back. Please listen to the following message. |
| agent-menu                                    | Press 1 to hear the message again. Press 2 to be connected to the caller. |
| callback-error                                | I'm sorry, we were not able to collect enough information to call you back. Please remain on the line for the next available agent. |
| general-retry                                 | I'm sorry, I didn't get that.                  |
| goodbye                                       | You may hang up the phone now. Good bye.       |</p>
<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>noanswer</td>
<td>We were not able to reach the customer.</td>
</tr>
<tr>
<td>offer-decline</td>
<td>Please remain on the line for the next available agent.</td>
</tr>
<tr>
<td>offer-intro-a</td>
<td>Would you like to leave a message and be called back by the next available agent?</td>
</tr>
<tr>
<td>offer-intro-b</td>
<td>Press one to leave a message, press two to remain on the phone.</td>
</tr>
<tr>
<td>phone-collect</td>
<td>Using your telephone keypad, please enter your ten digit phone number, starting with the area code.</td>
</tr>
<tr>
<td>phone-collect-E164</td>
<td>Using your telephone keypad, please enter your phone number, starting with the country code.</td>
</tr>
<tr>
<td>phone-confirm-a</td>
<td>You entered</td>
</tr>
<tr>
<td>phone-confirm-b</td>
<td>Press 1 if that is your correct phone number. Press 2 if it is not correct.</td>
</tr>
<tr>
<td>phone-error</td>
<td>I'm sorry, let's try that again.</td>
</tr>
<tr>
<td>phone-invalid</td>
<td>I'm sorry, that is not a valid phone number. In order to call you back, we need a ten digit phone number starting with the area code.</td>
</tr>
<tr>
<td>phone-invalid-900</td>
<td>I'm sorry, we can not call you back at a premium service number. Please enter a different phone number.</td>
</tr>
<tr>
<td>phone-invalid-TFN</td>
<td>I'm sorry, we can not call you back at a toll free number. Please enter a different phone number.</td>
</tr>
<tr>
<td>phone-retry</td>
<td>I'm sorry, I didn't get that. Please enter just the ten digits of your phone number starting with the area code. For example, 342 555 0187.</td>
</tr>
<tr>
<td>phone-retry-E164</td>
<td>I'm sorry, I didn't get that. Please enter just the digits of your phone number starting with the country code. For example, a number in the UK would be entered as 44 207 123 1234.</td>
</tr>
<tr>
<td>record-confirm-a</td>
<td>You recorded</td>
</tr>
<tr>
<td>record-confirm-b</td>
<td>If you are happy with your recording, press 1 or hang up. Press two to re-record your message.</td>
</tr>
</tbody>
</table>
Please record your message. When you are done recording, hang up or press the pound key for more options.

| num-0 | zero |
| num-1 | one |
| num-2 | two |
| num-3 | three |
| num-4 | four |
| num-5 | five |
| num-6 | six |
| num-7 | seven |
| num-8 | eight |
| num-9 | nine |

NOTE: The localized prompt names must be identical to those shown above.

NOTE: The English text provided above contains the text of the current prompts.

NOTE: The Text prompts are optional as there currently is no localized Text-to-Speech support.

Available in Phase(s):

Queue
Offer Post Call Survey

Call Action: Offer Post Call Survey

Play audio asking the caller to participate in a post call customer satisfaction survey. You can select the audio to play from your library and specify which survey to offer.

Options

- Invitation Audio—the audio prompt to play to the caller announcing the intent to play the survey. Typically, this audio prompt instructs the caller to press a DTMF key to accept the survey.
- Survey—the survey IVR to play.
- Offer to—sets the percentage of callers to whom to play the survey.
- Force Survey—disables the invitation audio and plays the survey without the caller's acceptance.
  
If you wish to play audio announcing this action, define a separate Play Audio action before the Offer Post Call Survey action.

Available in Phase(s):

Arrival, Queue
Play Audio

Call Action:

Plays one or more audio clips from your library to the caller.

Available in Phase(s):

Arrival, Queue
Play Audio Loop

**Call Action:** Play Audio Loop

Plays one or more audio clips from your library to the caller in a loop. You can loop the selected audio clips for a specific number of seconds, or play them indefinitely.

*TIP:* Indefinite audio loops are commonly used in the Queue phase to play audio until an Agent answers the phone. A timed loop can be used to play audio for a certain amount of time, followed by additional Call Actions, e.g. Offer Call Back with Voicemail.

Available in Phase(s):

Arrival, Queue
Play Estimated Wait Time

**Call Action: Play Estimated Wait Time**

Plays the estimated time that the caller will wait in the Queue. You must provide an estimated average call length; \{T:cc_short\} will then calculate the wait time based on that figure compared to the number of available Agents and the number of calls already in the Queue.

Options:

- Minimum Wait Time—specify the minimum estimated wait time, in seconds, during which no audio will be played. Estimated wait time audio will only be played to calls with estimated wait times greater than this value.
- Average Call Length—the user supplied estimated average call length.

**TIP:** *Report Tool can provide average call length calculations for Campaigns with a history of live calls. For example, the "Call Interaction - Group" report type includes Average Call Length in the Show Fields list (unchecked by default).*

- Estimated Wait Time Threshold Audio—specify the estimated wait time, in minutes, at which to play estimated wait audio. Click a numbered time threshold to select it (white background) or deselect it (blue background). Click the audio icon to hear the audio that will be played for that threshold.

Audio will be played for the nearest selected threshold that is higher than the actual estimated wait time for the call.

**Example:**

If the actual estimated wait time for the call is 3 minutes and 20 seconds, and the next highest selected threshold is 5 minutes, the caller will hear the 5 minute threshold audio.

You can customize the threshold audio by editing the LiveOps Queue audio catalog:

1. Select the Configuration > Call Assets > Audio Library menu.
2. Choose the LiveOps Queue audio catalog.
3. Add your customized audio to any or all of the waittime_x audio files (where x represents the threshold). E.g. waittime_1 is the one minute threshold, waittime_5 is the five minute threshold, etc.
   - The waittime_99 audio file contains the audio for the 60+ minute threshold.
Playing Localized Audio

To create a localized audio catalog for the Estimated Wait Time call action, you must record the following prompts in your target language(s) and add them to the LiveOps Queue audio catalog:

<table>
<thead>
<tr>
<th>Audio File</th>
<th>Estimated Wait Time Audio Prompts</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>waittime_1</td>
<td>Your estimated wait time is about one minute.</td>
<td>Your estimated wait time is about one minute.</td>
</tr>
<tr>
<td>waittime_10</td>
<td>Your estimated wait time is about ten minutes.</td>
<td>Your estimated wait time is about ten minutes.</td>
</tr>
<tr>
<td>waittime_15</td>
<td>Your estimated wait time is about fifteen minutes.</td>
<td>Your estimated wait time is about fifteen minutes.</td>
</tr>
<tr>
<td>waittime_2</td>
<td>Your estimated wait time is about two minutes.</td>
<td>Your estimated wait time is about two minutes.</td>
</tr>
<tr>
<td>waittime_20</td>
<td>Your estimated wait time is about twenty minutes.</td>
<td>Your estimated wait time is about twenty minutes.</td>
</tr>
<tr>
<td>waittime_25</td>
<td>Your estimated wait time is about twenty-five minutes.</td>
<td>Your estimated wait time is about twenty-five minutes.</td>
</tr>
<tr>
<td>waittime_3</td>
<td>Your estimated wait time is about three minutes.</td>
<td>Your estimated wait time is about three minutes.</td>
</tr>
<tr>
<td>waittime_30</td>
<td>Your estimated wait time is about thirty minutes.</td>
<td>Your estimated wait time is about thirty minutes.</td>
</tr>
<tr>
<td>waittime_35</td>
<td>Your estimated wait time is about thirty-five minutes.</td>
<td>Your estimated wait time is about thirty-five minutes.</td>
</tr>
<tr>
<td>waittime_4</td>
<td>Your estimated wait time is about four minutes.</td>
<td>Your estimated wait time is about four minutes.</td>
</tr>
<tr>
<td>waittime_40</td>
<td>Your estimated wait time is about forty minutes.</td>
<td>Your estimated wait time is about forty minutes.</td>
</tr>
<tr>
<td>waittime_45</td>
<td>Your estimated wait time is about forty-five minutes.</td>
<td>Your estimated wait time is about forty-five minutes.</td>
</tr>
<tr>
<td>waittime_5</td>
<td>Your estimated wait time is about five minutes.</td>
<td>Your estimated wait time is about five minutes.</td>
</tr>
<tr>
<td>waittime_50</td>
<td>Your estimated wait time is about fifty minutes.</td>
<td>Your estimated wait time is about fifty minutes.</td>
</tr>
<tr>
<td>waittime_55</td>
<td>Your estimated wait time is about fifty-five minutes.</td>
<td>Your estimated wait time is about fifty-five minutes.</td>
</tr>
<tr>
<td>waittime_60</td>
<td>Your estimated wait time is one hour.</td>
<td>Your estimated wait time is one hour.</td>
</tr>
</tbody>
</table>

**NOTE:** The localized prompt names must be identical to those shown above.

**NOTE:** The English text provided above contains the text of the current prompts.

**NOTE:** The Text prompts are optional as there currently is no localized Text-to-Speech support.

Available in Phase(s):

Queue
Play Live Announcement

Call Action: Play Live Announcement

Plays the Live Announcement audio clip associated with this Flow's controlling Campaign.

TIP: The Live Announcement feature is used to insert an audio prompt into the call queue. You can use this feature for special messages or other unplanned events.

Available in Phase(s):

Arrival, Queue
Play Phone Rings

Call Action: Play Phone Rings

Play the sound of a phone ringing. You can select the audio to use from your library and specify the length of time to play this clip.

Available in Phase(s):

Arrival, Queue
Prioritize Calls

**Call Action:** Prioritize Calls

Set call prioritization options for this Flow.

Options:

- **Queue Time Multiplier**—Enter a number that raises or lowers this call's apparent time in queue. When taking calls out of the queue, the system will multiply the length of time in the queue by this value to determine which calls to take first. When there is a call queue, the system tries to give calls to people who have been waiting the longest. To determine this, Contact Center takes each call's actual time in queue and multiplies it by the Queue Time Multiplier set for this call's Campaign. For example, a call that has been sitting in the queue for 60 seconds on a Campaign whose Queue Time Multiplier is 1.5 will be treated as if it has been in the queue for 90 seconds. Practically speaking, the bigger the Queue Time Multiplier, the "more important" a Campaign is considered, and the more rapidly its calls will be given to an Agent. The default value is 1.0.

- **Call Priority**—Set an absolute priority for the call in relation to other calls being handled by this Flow.

- Standard IVR based Campaigns have a very similar call priority option.

Available in Phase(s):

Arrival, Queue
Select Agent With Pools

Call Action: Select Agents with Pools

Route the call to an Agent Pool.

Options:

- Select Agent Pool—Use the Pools drop down to select an Agent Pool. Click the Add New link to add multiple pools.
- Add these agents to the current agent selection—Make the Agent selection additive.
  - You can have multiple "Select Agent..." Actions in a Call Flow. By default, on Agent selection overrides the previous selection. If this option is checked, the Agent selections are additive. This can be used, for example, to expand the pools of Agents who are eligible to take a call after a certain amount of time in queue.

Available in Phase(s):

Arrival, Queue
Select Agent With Pools And Rules

Call Action: Select Agents with Pools and Rules

Further refine your Agent Pools by specifying additional Agent selection rules. Rules are based on Agent Attributes.

Options:

- Select Agent Pool—Use the Pools drop down to select an Agent Pool. Click the Add New link to add multiple pools.
- Rule —Select an Agent Attribute from the drop down list. Type a literal value or an expression into the contains field. Only Agents in the associated Pool matching this rule will be eligible to receive calls for this Flow.
- Add these agents to the current agent selection

See the Select Agents with Pools call action for a description of this option.

NOTE: Rules apply to the parent Pool only. If you wish to apply the same rule to multiple Pools, you must define that rule for each Pool.

Available in Phase(s):

Arrival, Queue
Select An Individual Agent

Call Action:

Route the call to a specific Agent, by name or by Call Attribute.

Options:

- By User Name—Select the Agent by name.
- By Call Attribute—Select a specific Agent whose Agent ID is stored within the specified Call Attribute.

Available in Phase(s):

Arrival, Queue
Set Call Attribute

**Call Action:** *Set Call Attribute*

Give a Call Attribute a value.

Call Attributes are bits of data about the call. They are available for reporting, monitoring, routing decisions, and Agent selection. The value can be a static bit of information, or it can be the result of an expression. Check the Set to expression check box to enter an expression.

Arrival, Queue

Available in Phase(s):

Arrival, Queue
Suppress Post Call Survey

Call Action: Suppress Post Call Survey

Prevents the playing of any previously defined post call surveys. You may wish to do this in situations when the call terminate in such a way that the survey is no longer appropriate, for example when transferring to an external number or an unrelated Campaign. The Suppress Post Call Survey call action does not include an audio prompt, so any audio you wish to play to the caller should be defined separately in a Play Audio action.

Available in Phase(s):

Arrival, Queue
Transfer To Number

Call Action: Transfer To Number

Transfer the call to a specific telephone number.

Options:

- Number to Call—enter the complete telephone number to call.
- Use Call Attribute—transfer the call to a number stored in a call attribute.
- Audio to play while connecting—select an audio clip from your library to play to the caller. The default behavior is to play a ringing tones
- Timeout—set the timeout, in seconds. If there is no answer after this time, the call will be disconnected.

Available in Phase(s):

Arrival, Queue
Transfer to Campaign

Call Action: Transfer to Campaign

Transfer the call to another Campaign. That Campaign can point to a new Call Flow, or it can be a standard IVR based Campaign.

Available in Phase(s):

Arrival, Queue