



DialogflowParam

The `DialogflowParam` element can be used to engage the Google Dialogflow services. The `DialogflowParam` element is located under the **Virtual Assistant–Voice** group in the **Call Studio Elements**. This element is an extension of `Form` element and it engages the Speech Server resource on VVB to communicate with the Google Speech-to-Text Server to get user input and then send it to Dialogflow and fills param value from it. To indicate the Dialogflow server resource requirement, Call Studio creates a specific grammar - **builtin:speech/transcribe** - and sends it to VVB in VXML Page.

Note The `DialogflowParam` element works both with Cisco DTMF and Nuance ASR adaptors.

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Settings

| Name (Label) | Type | Required | Single Setting Value | Substitution Allowed | Default | Notes |
|-----------------|--------------|----------|----------------------|----------------------|---------|--|
| Input Mode | string | Yes | true | false | voice | The type of entry allowed for input. Possible values are <code>voice</code> (voice only) and <code>dtmf+voice</code> (DTMF and voice). |
| NoInput Timeout | int ≥ 0 | Yes | true | true | 5s | The maximum duration allowed for silence before a <code>NoInput</code> event is triggered. Possible |

| Name (Label) | Type | Required | Single Setting Value | Substitution Allowed | Default | Notes |
|-------------------|---------|----------|----------------------|----------------------|---------|--|
| | | | | | | values are standard time designations including non-negative numbers and a time unit. For example, 3s (for seconds) or 300 ms (for milliseconds). |
| Max NoInput Count | int ≥ 0 | Yes | true | true | 3 | The maximum number of noinput events allowed during input capture. Possible values are int > 0 where 0 indicates infinite NoInput events permitted. |
| Max NoMatch Count | int ≥ 0 | Yes | true | true | 3 | The maximum number of NoMatch events allowed during DTMF input capture. Possible values are int > 0 where 0 indicates infinite NoMatch events permitted. |
| DTMF Grammar | string | Yes | true | yes | None | This option is mandatory only if the input mode selected is DTMF and voice. It supports Cisco DTMF regex. |
| Send Digits to DF | boolean | Yes | true | true | true | This option is mandatory only if the input mode selected is DTMF and voice. It enables or disables submitting digits collected to the Dialogflow. |

| Name (Label) | Type | Required | Single Setting Value | Substitution Allowed | Default | Notes |
|-----------------------|---------|----------|----------------------|----------------------|---------|---|
| Secure Logging | boolean | Yes | true | true | false | Indicates whether logging of potentially sensitive data of the element is enabled. If this is set to <code>true</code> , the element's potentially sensitive data is not logged. |
| Termination Character | string | No | true | true | # | Terminates the voice stream or DTMF collection. |
| Max Input Time | int ≥ 0 | Yes | true | true | 30s | The maximum time (in seconds) the voice input is allowed to last. Possible values are positive integer values followed by <code>s</code> (seconds). For example, <code>50s</code> . Default value is <code>30s</code> . |
| Final Silence | int > 0 | Yes | true | true | 1s | The interval of silence (in seconds or milliseconds) that indicates the end of speech. Possible values are positive integer values followed by either <code>s</code> (seconds) or <code>ms</code> (milliseconds). For example, <code>3s</code> and <code>3000ms</code> . Default value is <code>1s</code> . |
| intent | string | Yes | true | true | None | The current intent to be processed for parameter extraction. |
| variable | string | Yes | true | true | None | The variable to be processed for a particular intent mentioned in intent field. |

| Name (Label) | Type | Required | Single Setting Value | Substitution Allowed | Default | Notes |
|----------------|---------|----------|----------------------|----------------------|---------|--|
| | | | | | | Note Variable name should match the one defined in Google Dialogflow. |
| Last Parameter | boolean | Yes | true | true | false | This indicates end of parameter capture. If it is set to <code>true</code> , the intent is marked as complete. |
| Phrase Hints | string | No | true | true | None | This is comma separated string that lists the hints for recognition. Hints are used to recognize a phrase or a word that is pronounced differently. For example, Savings, Current. |
| Param Reset | boolean | Yes | true | true | false | If set to <code>true</code> , clears the parameter value captured from Dialogflow and enables reprompting. |

Custom VoiceXML Properties

| Name (Label) | Type | Notes |
|-------------------------------------|--------|---|
| Dialogflow.queryParams .payload | JSON | Sets the payload to be sent to Dialogflow. |
| Dialogflow.queryParams .timeZone | String | Sets the timezone to be sent to Dialogflow. For example, America/New_York, Europe/Paris. |

| Name (Label) | Type | Notes |
|--|-----------------------------------|--|
| <code>Dialogflow.queryParams.geoLocation</code> | String (comma separated value) | Sets the geographical location to be sent to Dialogflow. For example, "50.0,50.0". |
| <code>Dialogflow.queryParams.sessionEntityTypes</code> | JSON | Sets the additional entity types to be sent to Dialogflow. For example, <pre>[{'name': 'class', 'entityOverrideMode': 'ENTITY_OVERRIDE_MODE_OVERRIDE', 'entities': [{'value': 'economy', 'synonyms': ['eco', 'economy']}]}]</pre> . |
| <code>Dialogflow.queryParams.sentimentAnalysisRequestConfig</code> | Boolean | Configures the type of sentiment analysis to perform. If not provided, sentiment analysis is not performed. Note Sentiment Analysis is currently available only for Enterprise Edition agents. |

Element Data

The following table lists the data that is stored in element after processing the `DialogflowParam` element.

| Element Data | Description |
|-------------------------------|---|
| <code>action</code> | This is the <code>action</code> parameter from Dialogflow. |
| <code>fulfillment_text</code> | This is fulfillment text from Dialogflow. |
| <code>input_type</code> | Indicates the type of input captured (<code>dtmf</code> or <code>dtmf+voice</code>). |
| <code>intent</code> | Indicates the intent of a parameter. |
| <code>json</code> | Contains JSON response from Dialogflow. For response formats, see <code>json</code> details in the Dialogflow Element Data . |
| <code>asr_json</code> | Contains JSON response from Speech Recognition. |
| <code>original_value</code> | Indicates the parameter value as uttered by the user in string. |

| Element Data | Description |
|-----------------|--|
| value | This is the parameter value returned by Dialogflow if input type is voice. If input type is dtmf, it contains the DTMF key that is pressed by the user. |
| confidence | The Speech recognition confidence between 0.0 and 1.0. A higher number indicates a greater probability that the recognized words are correct. The default of 0.0 is a sentinel value indicating that confidence was not set. |
| sentiment_score | Sentiment score of the user input. |

Exit States

| Exit State | Description |
|---------------|--|
| Done | This is returned when the configured parameter is filled. |
| Intent_Change | This is returned when Dialogflow switches to a different intent whose filling slot is based on user utterance. |
| MAX_NoInput | This state is encountered when there is no input from the user for a specified duration as configured in the setting. |
| MAX_NoMatch | This state is returned when the variable or parameter mentioned in element setting is not matched for specified number of times as mentioned in settings. If the input type is dtmf+voice, this state is encountered when the DTMF input does not match regex grammar for the specified number of times as mentioned in settings. |

Audio Group

Form Data Capture

| Name (Label) | Required | Max1 | Notes |
|----------------------------------|----------|------|---------------------------------------|
| initial_audio_group (Initial) | Yes | Yes | Played when the voice element begins. |
| nomatch_audio_group (NoMatch) | No | No | Played when a NoMatch event occurs. |

| Name (Label) | Required | Max1 | Notes |
|----------------------------------|----------|------|--|
| | | | This is applicable only when the input type is dtmf+voice. |
| noinput_audio_group (NoInput) | No | No | Played when a NoInput event occurs. |

End

| Name (Label) | Required | Max1 | Notes |
|----------------------------|----------|------|--|
| done_audio_group (Done) | No | Yes | Played when the form data capture is completed and the voice element exits with the Done exit state. |

Folder and Class Information

| Studio Element Folder Name | Class Name |
|----------------------------|-------------------------------------|
| Form | com.audium.server.voiceElement.form |

Events

| Name (Label) | Notes |
|--------------|---|
| Event Type | You can select Java Exception , VXML Event , or Hotlink as the event handler for this element. |

