



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 true, 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 true, 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.

