



DialogflowIntent Element

The `DialogflowIntent` element is used to engage the Google Dialogflow services. The `DialogflowIntent` element is located under the **Customer Virtual Assistant** group in the **Call Studio Elements**. This element is an extension of the `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 finds user intent 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 `DialogflowIntent` element works only in VoiceXML 2.1 with Cisco DTMF VoiceXML Gateway adaptor.
 - Use `dtmf+voice` as the input type only if you do not have any `DialogflowParam` associated with this element.

- [Settings, on page 1](#)
- [Custom VoiceXML Properties, on page 4](#)
- [Element Data, on page 5](#)
- [Exit States, on page 6](#)
- [Audio Group, on page 6](#)

Settings

Name (Label)	Type	Required	Single Setting Value	Substitution Allowed	Default	Notes
Service Account ID	string	Yes	true	true	None	Dialogflow project ID that is configured for your intents and NLP modelling. Copy the corresponding project JSON key file to %CVP_HOME%\conf. Naming convention

Name (Label)	Type	Required	Single Setting Value	Substitution Allowed	Default	Notes
						<p>of the key file must be <code><Service Account ID>.json</code>.</p> <p>See the <i>Customer Virtual Assistant > Prerequisites</i> section in the <i>Cisco Unified Contact Center Enterprise Features Guide</i> at https://www.cisco.com/c/enr/products/collab/voice_products/cucce/enterprise_features_guide/enterprise_features_guide_01162016.html for the procedure to generate the key file for Dialogflow.</p>
Input Mode	string	Yes	true	false	voice	The type of entry allowed for input. Possible values are <code>voice</code> (only voice input) and <code>dtmf+voice</code> (DTMF and voice input).
NoInput Timeout	<code>int ≥ 0</code>	Yes	true	true	5s	The maximum duration allowed for silence before a <code>NoInput</code> event is triggered. Possible values are standard time designations including non-negative numbers and a time unit. For example, <code>3s</code> (for seconds) or <code>300 ms</code> (for milliseconds).
Max NoInput Count	<code>int ≥ 0</code>	Yes	true	true	3	The maximum number of <code>noinput</code> events allowed during input capture. Possible values are <code>int > 0</code> where <code>0</code> indicates infinite <code>NoInput</code> events permitted.

Name (Label)	Type	Required	Single Setting Value	Substitution Allowed	Default	Notes
Max NoMatch Count	$\text{int} \geq 0$	Yes	true	true	3	The maximum number of NoMatch events allowed during DTMF input capture. Possible values are $\text{int} > 0$ where 0 indicates infinite NoMatch events permitted.
DTMF Grammar	string	Yes	yes	yes	None	This option is mandatory only if the input type selected is dtmf+voice. It supports Cisco DTMF regex.
Secure Logging	boolean	Yes	true	true	false	Indicates whether logging of potentially sensitive data of the element is enabled. If this is set to true, 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	$\text{int} \geq 0$	Yes	true	true	30s	The maximum time (in seconds) the voice input is allowed to last. Possible values are positive integer values followed by s (seconds). For example, 50s. Default value is 30s.
Final Silence	$\text{int} \geq 0$	Yes	true	true	2s	The interval of silence (in seconds or milliseconds) that indicates the end of speech. Possible values are positive integer values followed by either s

Name (Label)	Type	Required	Single Setting Value	Substitution Allowed	Default	Notes
						(seconds) or ms (milliseconds). For example, 3s and 3000ms. Default value is 2s.
Recognize. phraseHints	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.
Recognize. alternateLanguages	String	No	true	true	None	Comma separated string of up to 3 additional BCP-47 language tags, listing possible alternative languages of the supplied audio other than the default language.

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.
Dialogflow.queryParams.geoLocation	String (comma separated value)	Sets the geographical location to be sent to Dialogflow. For example, "50.0,50.0".

Name (Label)	Type	Notes
Dialogflow.queryParams .sentimentAnalysisRequestConfig	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 `DialogflowIntent` element.

Element Data	Description
action	This is the <code>action</code> parameter from Dialogflow.
fulillment_text	This is the fulfillment text from Dialogflow.
input_type	Indicates the type of input captured (<code>dtmf</code> or <code>dtmf+voice</code>).
json	Contains JSON response from Dialogflow.
original_value	This is the text that is transcribed from voice. This is applicable only if the input type is <code>voice</code> .
value	This is the name of the intent that is matched by the element if input type is <code>voice</code> . If input type is <code>dtmf</code> , 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.
language_code	The language code that was triggered during recognition. Also see <code>Recognize.alternateLanguages</code> under Settings .
sentiment_score	Sentiment score of the user input.

Exit States

Exit State	Description
Done	This is returned after matching the intent. For DTMF, this state is returned when the DTMF input matches DTMF regex grammar.
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 never returned if the input type is voice. If the input type is <code>dtmf</code> and <code>voice</code> , 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 <code>NoMatch</code> event occurs. This is applicable only when the input mode is DTMF and voice.
noinput_audio_group (NoInput)	No	No	Played when a <code>NoInput</code> event occurs.

End

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