



Dialogflow Element

The `Dialogflow` element can be used to engage the Google Dialogflow services. The `Dialogflow` element is located under the **Customer Virtual Assistant** group in the **Call Studio Elements**. This element is an extension of `Form` element and it engages the special resource on VVB called Speech Server to communicate with the Dialogflow Server. To indicate the Dialogflow server resource requirement, Call Studio creates a specific grammar - `builtin:speech/nlp@dialogflow` - and sends it to VVB in VXML Page.

Note The `Dialogflow` element works only in VoiceXML 2.1 with Cisco DTMF VoiceXML Gateway adaptor.

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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.
Audio Output	boolean	Yes	true	false	false	Whether to use the Dialogflow feature to get the audio output from Dialogflow. Can be used while performing Slot / Intent fulfilment at Dialogflow.
NoInput Timeout	int ≥ 0	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 both 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 int > 0 where 0 indicates infinite NoInput events allowed.
Secure Logging	boolean	Yes	true	true	false	Indicates whether logging of potentially sensitive data of the element is enabled. If set to true, the element's potentially sensitive data is not logged.
Termination Character	string	No	true	true	#	Terminate 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 s (seconds). For example, 50s. Default value is 30s.
Final Silence	int ≥ 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 (seconds) or ms (milliseconds). For example, 3s and 3000ms. Default value is 2s.
Initiation Text	string	No	true	true	Hello	Text sent to initiate the dialog with Dialogflow. The response for this is the welcome intent from Dialogflow. This is applicable only when Audio Output is set to true.

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.	String	Sets the geographical location to be sent to Dialogflow.

Name (Label)	Type	Notes
geoLocation		For example, "50.0,50.0".
Dialogflow.queryParams .sessionEntityTypes	JSON	Sets the additional entity types to be sent to Dialogflow. For example, <code>[{"name": "entityOverride", "EMBEDDING_OVERRIDE": "EMBEDDING_OVERRIDE", "entities": [{"value": "entity_override", "synonyms": ["entity_override"]}]}]</code> .
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.
Recognize.singleUtterance	Boolean	Indicates whether this request should automatically end after speech is no longer detected. If this parameter is enabled, cloud speech-to-text will detect pauses, silence, or non-speech audio to determine when to end recognition. If this parameter is disabled, the stream will continue to listen and process audio until either the stream is closed directly, or the stream's length limit is reached. The default setting for this parameter is <code>true</code> .
Recognize.model	String	This is used to specify the machine learning model to be used by the cloud speech-to-text transcription to improve the recognition results. For example, see https://cloud.google.com/speech-to-text/docs/basics

Element Data

Element Data	Notes
intent	Intent identified.
query_text	User input.
fulfilment_text	Fulfilment text returned by Dialogflow.
value	JSON value returned by Dialogflow.
action	Returns the action associated with the intent.
is_complete	Indicates whether all the required parameters are filled. This can be used to derive exit states with decision element. <ul style="list-style-type: none"> • If all parameters are not filled, it is <code>false</code>. • If an intent has no parameters, this is always <code>true</code>.

json	Contains JSON response from Dialogflow.
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.
sentiment_score	Sentiment score of the user input.

Exit States

Name	Notes
done	This state is returned after receiving response from Dialogflow. This indicates that the processing from Dialogflow has been completed.
max_noinput	Maximum number of noinput events that have occurred. If <code>noinput max count</code> is 0, this exit state will not occur.

Audio Group

Form Data Capture

Name (Label)	Required	Max1	Notes
initial_audio_group (Initial)	Yes	Yes	Played when the voice element begins.
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 voice element exits with the <code>Done</code> exit state.

Folder and Class Information

Studio Element Folder Name	Class Name
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Form

`com.audium.server.voiceElement.form.`

Events

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

