Menu Support for 2_Option_Menu Through 10_Option_Menu

These voice elements define menus that support from 2 to 10 options. The Menu voice elements are similar to the Form voice element, however the number of choices is fixed and all grammars are defined in the voice element itself. Additionally, there is an exit state for each option, therefore the captured value does not have to be analyzed afterwards to determine the next dialog in the call flow. Use Menu elements when the situation defines a fixed number of choices where each choice does something different in the call flow.

Because the number of exit states is fixed for a voice element, there are separate voice elements for Menu voice elements with 2 to10 options. For each additional option, three additional settings are added to handle the spoken keyword, DTMF entry, and interpretation value for each option. The audio groups and element data saved are the same for all Menu voice elements.

Each option must be assigned an interpretation value that the element will return as element data named `value` when any of the keywords or DTMF key presses assigned to that option are captured. The element variable (`value`) will contain the same value regardless of the input mode (speech or DTMF).

The audio groups are identical to those of the Form voice element. The `done_audio_group` group may be used for a message that is to be played regardless of what option is chosen. If you require an option specific message, use an Audio voice element after the particular choice is made and do not configure a `done_audio_group`

Settings

Name (Label)	Type	Req'd	Single Setting Value	Substitution Allowed	Default	Notes
noinput_timeout (Noinput Timeout)	string	Yes	`true`	`true`	5s	The maximum time allowed for silence or no keypress before a noinput event is

						thrown. Possible values are standard time designations including both a non-negative number and a time unit, for example, 3s (for seconds) or 3000ms (for milliseconds). Default = 5s.
max_noinput_count (Max NoInput Count)	int ≥ 0	Yes	`true`	`true`	3	The maximum number of noinput events allowed during input capture. 0 = infinite noinputs allowed.
max_nomatch_count (Max NoMatch Count)	int ≥ 0	Yes	`true`	`true`	3	The maximum number of nomatch events allowed during input capture. 0 = infinite nomatches allowed.
confidence_level (Confidence Level)	decimal (0.0 to 1.0)	Yes	`true`	`true`	0.40	The confidence level threshold to use.
modal (Disable Hotlinks)	boolean	Yes	`true`	`true`	`false`	Whether or not to temporarily disable all hotlink grammars (global or local) and universal grammars. If set to true, only the grammars of the current X_Option_Menu element will be enabled for the duration of the element. Otherwise all active grammars will be enabled.
optionX_dtmf (Option X DTMF)	Character (0-9, #, *)	No	`true`	`true`	*None*	This setting defines the DTMF grammar that can be used to select the menu `optionX`. The valid format is a string separated with a semi-colon specifying two values in this order: 1. The language context in which the current input should be included in the menu grammar (optional). If omitted the language used will be the same as the page-scoped language. 2. The dtmf keypress or keypresses that is included in the menu DTMF grammar (required) Sample configurations values are: • en-US;1 • 1 Additional `optionX_dtmf` settings may be used to define multiple dtmf keypresses corresponding to the same return value.

						Note At minimum, one of the two settings: `optionX_dtmf` or `optionX_voice` must be specified. **Note** Keypresses are currently limited to single digits.
optionX_voice (Option X Voice)	string	No	`true`	`true`	*None*	This setting defines the voice grammar that can be used to select the menu `optionX`. Each configuration of this setting specifies an option for the grammar. The valid format is a string separated with semi-colons specifying three values in this order: 1. The language context in which the current input should be included in the menu grammar (optional). If omitted the language used will be the same as the page-scoped language. 2. *exact* or *approximate* (optional) for the accept attribute value, where if *exact*, the spoken utterance must match the expected value exactly; and where if *approximate*, the spoken utterance may match one of several words 3. The voice keyword or keywords (required) that is included in the menu voice grammar. If one of the optional parameters is defined, two semi-colons must be used, even if the other parameter is not used. Sample configuration values are: • en-US;exact;news report • ;approximate;news report • fr-FR;;news report • news report Additional `optionX_voice` settings may be used to define multiple matching voice keywords corresponding to the same return value.

						Note At the minimum, one of the two settings: `optionX_dtmf` or `optionX_voice` *must* be specified.
optionX_value (Option X Value)	string	Yes	`false`	`true`	*None*	The value to be stored in the element data value for this voice element when the caller selects *optionX*.
						Note Only a single value is allowed for each option.

Where X is 2 – 10 as applicable.

Some voice browsers may not support menu options using * or #.

Element Data

Name	Type	Notes
value	string	The value associated with the keyword or DTMF keypress inputted by the caller is stored in this variable.
value_confidence	float	This is the confidence value of the matched utterance.

Exit States

Name	Notes
max_nomatch	The maximum number of nomatch events has occurred. If the max_nomatch_count is 0, this exit state will never occur.
max_noinput	The maximum number of noinput events has occurred. If the max_noinput_count is 0, this exit state will never occur.
optionX	The utterance or DTMF entry matched optionX.

Where X is 2 – 10 as applicable.

Note Each option can react on just a spoken keyword, just DTMF keypresses, or both, but at least one method must be specified or an error will be reported.

Note All options in the menu must have a consistent input mode. For example, a menu cannot be configured so that option 1 is chosen through both voice and DTMF but option 2 is chosen only through voice.

Note There are no menus with more than 10 options. In cases where more are needed, use a Form voice element.

Audio Groups

Menu Option Capture

Name (Label)	Req'd	Max1	Notes
initial_audio_group (Initial)	Yes	Yes	Played when the voice element first begins.
nomatch_audio_group (NoMatch)	No	No	Played when a nomatch event occurs.
noinput_audio_group (NoInput)	No	No	Played when a noinput event occurs.
help_audio_group (Help)	No	No	Played when the caller asked for help. If not specified, by default help is treated as a nomatch.

End

Name (Label)	Req'd	Max 1	Notes
done_audio_group (Done)	No	Yes	Played when the voice element completes any of the option exit states.

Folder and Class Information

Studio Element Folder Name	Class Name
Menu	com.audium.server.voiceElement.menu.MFoundationXOptionMenu