Number

The `Number` voice element captures a number input from the caller. The number can be spoken or entered using the keypad. The resulting value will be stored in element data as a decimal value. The number can be negative or positive and can contain a decimal point. Using DTMF entry the number is restricted to being positive and the decimal point is entered by pressing the * key. Using speech input, the number may be spoken naturally.

Note You cannot use the * character to represent a decimal point in the `Number` voice element, if you have defined it as a **termchar** in the **Root Doc Settings**.

Settings

Name (Label)	Type	Req'd	Single Setting Value	Substitution Allowed	Default	Notes
inputmode (Input Mode)	string enum	Yes	true	false	both	The type of entry allowed for input. Possible values are: `voice` | `dtmf` | `both`.
noinput_timeout (Noinput Timeout)	string	Yes	true	true	5e	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 (Number Max NoInput Count)	int ≥ 0	Yes	true	true	3	The maximum number of noinput events allowed during number input capture. 0 = infinite noinputs allowed.
max_nomatch_count (Number Max NoMatch Count)	int ≥ 0	Yes	true	true	3	The maximum number of nomatch events allowed during number input capture. 0 = infinite nomatches allowed.
number_confidence_level (Number Confidence Level)	decimal (0.0 – 1.0)	Yes	true	true	0.40	The confidence level threshold to use during number capture.
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 Number element will be enabled for the duration of the element. Otherwise all active grammars will be enabled.
secure_logging (Secure Logging)	boolean	Yes	true	true	false	If set to true, user DTMF input for the element is considered secure and the attributes utterance, interpretation, value, nbestUtteranceX and nbestInterpretationX are masked in VXML server logs. The format used to render secure element attributes is to add a *_secureLogging* suffix. For example nbestUtterance1_secureLogging,*****.
maxnbest (Maxnbest)	int ≥ 1	Yes	true	true	1	The maximum number of speech recognition results that can be generated per voice input.

Refer to the Element Data table for information about nbestUtteranceX and nbestInterpretationX

Element Data

Name	Type	Notes
Value	string	The number captured and stored as a whole or decimal number with an optional minus sign.
value_confidence	float	This is the confidence value of the captured utterance. When n-best recognition is enabled, this stores the confidence score of the top hypothesis in the n-best list.

nbestLength	int ≥ 1	This stores the number of n-best hypotheses generated by the speech engine.
nbestUtterance1 nbestUtterance2 … nbestUtteranceX	string	This set of element data stores the captured n-best utterances. While the maximum number of nbestUtteranceX values is equal to the maxnbest setting value, the actual number of these values available is determined by speech recognition at runtime, where nbestUtterance1 holds the utterance of the top hypothesis in the n-best list and nbestUtteranceX holds the utterance of the last hypothesis.
nbestInterpretation1 nbestInterpretation2 … nbestInterpretationX	string	This set of element data stores the interpretations of captured n-best utterances. While the maximum number of nbestInterpretationX values is equal to the maxnbest setting value, the actual number of these values available is determined by speech recognition at runtime, where nbestInterpretation1 holds the interpretation of the top hypothesis in the n-best list and nbestInterpretationX holds the interpretation of the last hypothesis.
nbestConfidence1 nbestConfidence2 … nbestConfidenceX	float	This set of element data stores the confidence scores of captured n-best utterances. While the maximum number of nbestConfidenceX values is equal to the maxnbest setting value, the actual number of these values available is determined by speech recognition at runtime, where nbestConfidence1 holds the confidence score of the top hypothesis in the n-best list and nbestConfidenceX holds the confidence score of the last hypothesis.
nbestInputmode1 nbestInputmode2 … nbestInputmodeX	string	This set of element data stores the input modes of captured n-best utterances.

Exit States

Name	Notes
max_nomatch	The maximum number of nomatch events has occurred. If the nomatch max count is 0, this exit state will never occur.
max_noinput	The maximum number of noinput events has occurred. If the noinput max count is 0, this exit state will never occur.
done	The number capture was completed.

Note If the number to be captured is a positive whole number and the input is via DTMF, the number can be entered using this voice element or the Digits voice element.

Audio Groups

Number Capture

Name (Label)	Req'd	Max1	Notes
number_initial_audio_group (Number Initial)	Yes	Yes	Played when the voice element first begins.
number_nomatch_audio_group (Number NoMatch)	No	No	Played when a nomatch event occurs.
number_noinput_audio_group (Number NoInput)	No	No	Played when a noinput event occurs.
number_help_audio_group (Number 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 number capture is completed and the voice element exits with the done exit state.

Folder and Class Information

Studio Element Folder Name	Class Name
Number Capture	com.audium.server.voiceElement. number.MBasicNumber

Events

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