



YOUR VOICE HAS NO LIMIT

VSDK 6 Complete Configuration Document

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Field	Optional	Default Value	Type	Possible Values	Description/Notes
version	✗		String	2.0	Version of the whole document
csdk	✗		Object		
csdk/paths	✓		Object		
csdk/paths/cache	✓	cache	Path		Absolute or relative to vsdk.json
csdk/paths/data_root	✓		Path		Absolute or relative to vsdk.json
csdk/paths/acmod	✓	acmod	Path		Absolute or relative to data_root
csdk/paths/asr	✓	asr	Path		Absolute or relative to data_root
csdk/paths/clc	✓	clc	Path		Absolute or relative to data_root
csdk/paths/clc_ruleset	✓	clc	Path		Absolute or relative to data_root
csdk/paths/dictionary	✓	dictionaries	Path		Absolute or relative to data_root
csdk/paths/search	✓	ctx	Path		Absolute or relative to data_root
csdk/paths/sem3	✓	ctx	Path		Absolute or relative to data_root
csdk/paths/users	✓	users	Path		Absolute or relative to data_root
csdk/paths/audio_based_classifier_model	✓	abc	Path		Absolute or relative to data_root
csdk/paths/confusion_dictionary	✓	dictionaries	Path		Absolute or relative to data_root
csdk/paths/language_model	✓	lm	Path		Absolute or relative to data_root
csdk/tts	✗		Object		
csdk/tts/channels	✗		Object		
csdk/tts/channels/<channel_name_1>	✗		String		Name of the channel, used in code
csdk/tts/channels/<channel_name_1>/voices	✗		Array		
csdk/tts/channels/<channel_name_1>/voices/0	✗		String	<speaker>, <lang>, <quality>	
csdk/asr	✗		Object		
csdk/asr/recognizers	✗		Object		
csdk/asr/recognizers/<recognizer_name_1>	✗		String		Name of the recognizer, used in code
csdk/asr/recognizers/<recognizer_name_1>/acmods	✗		Array		Recognizers accept multiple acoustic models
csdk/asr/recognizers/<recognizer_name_1>/acmods/0	✗		String		
csdk/asr/models	✗		Object		
csdk/asr/models/<model_name_1>	✗		String		Name of the model, used in code
csdk/asr/models/<model_name_1>/type	✗		String	static, dynamic, free-speech	
csdk/asr/models/<model_name_1>/file	✗		File		Compiled model file name, extension is .fcf
csdk/asr/models/<model_name_1>/sem3	✓		String		Compiled semantic model file name, extension is .s3c
csdk/asr/models/<model_name_1>/settings	✓		Object		
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_STREAM_RESULT_MODE	✓	0	Int	0, 1	The mode in which intermediate results are displayed during recognition. 1 means partial result are activated
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_ACCURACY	✓	10000	Int	[100 ; 50000]	Trade-off between CPU-load, memory requirements and the obtained accuracy of the search
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_MAXNBEST	✓	3	Int	[1 ; 1000]	Maximum number of hypotheses returned in a result

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csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_TSILENCE	✓	100	Int	[100 ; 10000]	Minimum amount of trailing silence, in milliseconds. Use a higher value for non-WUW models
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_IG_LOWCONF	✓	5000	Int	[0 ; 10000]	Maximum amount of confidence level that indicates that a spoken utterance is out of grammar
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_IG_HIGHCONF	✓	5000	Int	[0 ; 10000]	Minimum amount of confidence level that indicates that a spoken utterance is in grammar
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_INITBEAMWIDTH	✓	2500	Int	[0 ; 10000]	Init beam width. This parameter affects low-level behavior of the algorithm
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_TANYSPEECH	✓	LH_FALSE	String	LH_TRUE, LH_FALSE	Allows the recognizer to stop the recognition process during the trailing AnySpeech state
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_NBESTRESULT_SETHIDDENKEYS	✓	LH_FALSE	String	LH_TRUE, LH_FALSE	When enabled additional information is included on the ASR result that can be used for the FM use case
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_ONDEMANDLOADING	✓	LH_FALSE	Int	LH_TRUE, LH_FALSE	Context on-demand loading
csdk/asr/models/<model_name_1>/settings/LH_SEARCH_PARAM_SPEECH_TIMEOUT	✓	0	Int	0, [100 ; 60000]	Speech duration timeout in milliseconds
csdk/asr/models/<model_name_1>/acmod	✗*		String		*Only for dynamic models. Must match with the one configured on the recognizer that will apply this model
csdk/asr/models/<model_name_1>/slots	✗*		Object		*Only for dynamic models.
csdk/asr/models/<model_name_1>/slots/<slot_name_1>	✗		Object		Name of the slot, used in the code
csdk/asr/models/<model_name_1>/slots/<slot_name_1>/slot	✗		String	<grammar-name>#<slot-name>	Grammar name is marked after !grammar and slot name is after !slot in your BNF grammar
csdk/asr/models/<model_name_1>/slots/<slot_name_1>/category	✓	normal	String	normal, name, artist	
csdk/asr/models/<model_name_1>/slots/<slot_name_1>/allow_custom_phonetic	✓	false	Bool		Setting to true will allow for custom phonetic to be provided for this slot
csdk/asr/models/<model_name_1>/lexicon	✗*		String		*Only for dynamic models.
csdk/asr/models/<model_name_1>/lexicon/clc	✗		File		Used during runtime compilation. Use a language that match the rest of the grammar and the recognizer this model will be applied on
csdk/asr/models/<model_name_1>/lexicon/settings	✓		Object		
csdk/asr/models/<model_name_1>/extra_models	✗*		Object		*Only for free-speech models. All models for a given language must be listed or the program won't function properly
csdk/asr/models/<model_name_1>/extra_models/<name>	✗		File		
tnl	✗		Object		
tnl/paths	✓		Object		
tnl/paths/cache	✓	cache	Path		Absolute or relative to vsdk.json
tnl/paths/models	✓		Path		Absolute or relative to vsdk.json
tnl/asr	✗		Object		
tnl/asr/recognizers	✗		String		
tnl/asr/recognizers/<recognizer_name_1>	✗		String		Name of the recognizer, used in the code



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tnl/asr/recognizers/<recognizer_name_1>/audio_buffer_size_seconds	✓	10	Int	> 0	In seconds , so multiply by 16000 to get the actual memory space allocated
tnl/asr/models	✗		Object		
tnl/asr/models/<model_name_1>	✗		Object		Name of the model, used in the code
tnl/asr/models/<model_name_1>/type	✗		String	static, dynamic	
tnl/asr/models/<model_name_1>/file	✗		File		Compiled model file name, extension is <code>.snsr</code>
tnl/asr/models/<model_name_1>/slots	✗*		Object		*Only for dynamic models
tnl/asr/models/<model_name_1>/slots/<slot_name_1>	✗		Object		Name of the slot, used in the code
tnl/asr/concurrent_model	✓*		File		*Only needed if you want to call <code>Recognizer::setModels()</code> . File name of a concurrent template model, extension is <code>.snsr</code>
vasr	✗		Object		
vasr/paths	✓		Object		
vasr/paths/data_root	✓		Path		Absolute or relative to <code>vsdk.json</code>
vasr/paths/models	✓	models	Path		Absolute or relative to <code>data_root</code>
vasr/paths/g2p	✓	g2p	Path		Absolute or relative to <code>data_root</code>
vasr/asr	✗		Object		
vasr/asr/recognizers	✗		Object		
vasr/asr/recognizers/<recognizer_name_1>	✗		String		Name of the recognizer, used in the code
vasr/asr/models	✗		Object		
vasr/asr/models/<model_name_1>	✗		String		Name of the model, used in the code
vasr/asr/models/<model_name_1>/type	✗		String	static, dynamic	
vasr/asr/models/<model_name_1>/dir	✗		Path		Absolute or relative to <code>paths/models</code>
vasr/asr/models/<model_name_1>/grammar	✗*		File		*Only for dynamic models. Absolute or relative to <code>dir</code> , extension is <code>.bnf</code>
vasr/asr/models/<model_name_1>/lang	✗*		String	eng-US, fra-FR	*Only for dynamic models. Used during g2p model search, like so: <code>g2p/model.fst</code> or <code>g2p/<lang>/model.fst</code>
vasr/asr/models/<model_name_1>/g2p	✓*		Path		*Only for dynamic models. Absolute or relative to <code>paths/g2p</code>
vasr/asr/models/<model_name_1>/slots	✗*		Object		*Only for dynamic models.
vasr/asr/models/<model_name_1>/slots/<slot_name_1>	✗		Object		Name of the slot, used in the code
baratinoo	✗		Object		
baratinoo/paths	✓		Object		
baratinoo/paths/data_root	✓		Path		Absolute or relative to <code>vsdk.json</code>
baratinoo/tts	✗		Object		
baratinoo/tts/channels	✗		Object		
baratinoo/tts/channels/<channel_name_1>	✗		Object		
baratinoo/tts/channels/<channel_name_1>/voices	✗		Array		
baratinoo/tts/channels/<channel_name_1>/voices/0	✗		String	<speaker>	
vtapi	✗		Object		
vtapi/paths	✓		Object		
vtapi/paths/data_root	✓		Path		Absolute or relative to <code>vsdk.json</code>
vtapi/tts	✗		Object		

Field	Optional	Default Value	Type	Possible Values	Description/Notes
vtapi/tts/channels	✗		Object		
vtapi/tts/channels/<channel_name_1>	✗		Object		
vtapi/tts/channels/<channel_name_1>/voices	✗		Array		
vtapi/tts/channels/<channel_name_1>/voices/0	✗		String	<speaker>, <quality>	
tssv	✗		Object		
tssv/biometrics	✗		Object		
tssv/biometrics/generated_models_path	✗		Path		Absolute or relative to the program's working directory
tssv/biometrics/background_model_TD	✗		File		Absolute or relative to the program's working directory
tssv/biometrics/background_model_TI	✗		File		Absolute or relative to the program's working directory
idvoice	✗		Object		
idvoice/biometrics	✗		Object		
idvoice/biometrics/generated_models_path	✗		Path		Absolute or relative to the program's working directory
idvoice/biometrics/background_model_TD	✗		File		Absolute or relative to the program's working directory
idvoice/biometrics/background_model_TI	✗		File		Absolute or relative to the program's working directory
vafe	✗		Object		
vafe/afe	✗		Object		
vafe/afe/analyzers	✗		Object		
vafe/afe/analyzers/<name_1>	✗		Object		
vafe/afe/analyzers/<name_1>/type	✗		String	snr, rt60, mos	
vafe/afe/analyzers/<name_1>/bitspersample	✗*		Int	Power of 2, [16 ; 1024]	*Only for rt60 analyzers.
vafe/afe/analyzers/<name_1>/model	✗*		Path		*Only for mos analyzers. Absolute path to the mos configuration file, extension is .json
vafe/afe/filters	✗		Object		
vafe/afe/filters/<name_1>	✗		Object		
vafe/afe/filters/<name_1>/type	✗		String	bandpass, lowpass, highpass	
vafe/afe/filters/<name_1>/lowfrequency	✗*		Int	[1 ; 16000]	*Only for bandpass filters.
vafe/afe/filters/<name_1>/highfrequency	✗*		Int	[1 ; 16000]	*Only for bandpass filters.
vafe/afe/filters/<name_1>/frequency	✗*		Int	[1 ; 16000]	*Only for lowpass and highpass filters.