

Table of Contents

Uralstech.UCloud.TextToSpeech	2
ITextToSpeechGetRequest	3
ITextToSpeechPostRequest	4
ITextToSpeechRequest	5
TextToSpeechManager	6
TextToSpeechVoiceGender	12
TextToSpeechVoiceName	13
TextToSpeechVoiceNameStringConverter	17
TextToSpeechVoiceType	19
Uralstech.UCloud.TextToSpeech.Exceptions	20
TextToSpeechRequestException	21
TextToSpeechResponseParsingException	24
Uralstech.UCloud.TextToSpeech.Synthesis	27
TextToSpeechCustomVoiceParameters	28
TextToSpeechSynthesisAudioConfiguration	29
TextToSpeechSynthesisAudioEncoding	33
TextToSpeechSynthesisInput	35
TextToSpeechSynthesisProfile	37
TextToSpeechSynthesisRequest	38
TextToSpeechSynthesisResponse	42
TextToSpeechSynthesisTimePoint	45
TextToSpeechSynthesisTimePointing	46
TextToSpeechSynthesisVoiceSelection	47
TextToSpeechSynthesizedAudioMetadata	50
Uralstech.UCloud.TextToSpeech.Voices	51
IEnumerableExtensions	52
TextToSpeechVoice	57
TextToSpeechVoiceListRequest	59
TextToSpeechVoiceListResponse	61

Namespace Uralstech.UCloud.TextToSpeech

Classes

[TextToSpeechManager](#)

The class for accessing the Google Cloud Text-To-Speech API!

[TextToSpeechVoiceName](#)

Denotes the name of a TTS voice by its separate parts.

[TextToSpeechVoiceNameStringConverter](#)

Converter to convert [TextToSpeechVoiceName](#) to a string and vice-versa.

Interfaces

[ITextToSpeechGetRequest](#)

All TTS API GET requests must inherit from this interface.

[ITextToSpeechPostRequest](#)

All TTS API POST requests must inherit from this interface.

[ITextToSpeechRequest](#)

All TTS API requests must inherit from this interface.

Enums

[TextToSpeechVoiceGender](#)

Gender of the voice as described in [SSML voice element](#)[↗](#).

[TextToSpeechVoiceType](#)

The types of voices supported by the TTS API.

Interface ITextToSpeechGetRequest

Namespace: [Uralstech.UCloud.TextToSpeech](#)

All TTS API GET requests must inherit from this interface.

```
public interface ITextToSpeechGetRequest : ITextToSpeechRequest
```

Inherited Members

[ITextToSpeechRequest.GetEndpointUri\(\)](#), [ITextToSpeechRequest.UriParent](#)

Interface ITextToSpeechPostRequest

Namespace: [Uralstech.UCloud.TextToSpeech](#)

All TTS API POST requests must inherit from this interface.

```
public interface ITextToSpeechPostRequest : ITextToSpeechRequest
```

Inherited Members

[ITextToSpeechRequest.GetEndpointUri\(\)](#), [ITextToSpeechRequest.UriParent](#)

Properties

ContentType

The MIME type of the request content.


```
string ContentType { get; }
```

Property Value

[string](#) 

Methods

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#) .

```
string GetUtf8EncodedData()
```

Returns

[string](#) 

The string data.

Interface ITextToSpeechRequest

Namespace: [Uralstech.UCloud.TextToSpeech](#)

All TTS API requests must inherit from this interface.

```
public interface ITextToSpeechRequest
```

Properties

UriParent

The base endpoint URI + version.

```
string UriParent { get; }
```

Property Value

[string](#) 

Methods

GetEndpointUri()

Gets the URI to the API endpoint.

```
string GetEndpointUri()
```

Returns

[string](#) 

The URI.


Class TextToSpeechManager

Namespace: [Uralstech.UCloud.TextToSpeech](#)

The class for accessing the Google Cloud Text-To-Speech API!

```
public class TextToSpeechManager : Singleton<TextToSpeechManager>
```

Inheritance

[object](#)  ← TextToSpeechManager

Fields

BaseServiceUri

The base URI to the Text To Speech service.

```
public const string BaseServiceUri = "https://texttospeech.googleapis.com"
```

Field Value

[string](#) 

BetaApiUri

The beta API URI to the Text To Speech service.

```
public const string BetaApiUri = "https://texttospeech.googleapis.com/v1beta1"
```

Field Value

[string](#) 

EmptyJsonObject

An empty JSON object.

```
private const string EmptyJsonObject = "{}"
```

Field Value

[string](#) 

ProductionApiUri

The production v1 API URI to the Text To Speech service.

```
public const string ProductionApiUri = "https://texttospeech.googleapis.com/v1"
```

Field Value

[string](#) 

_textToSpeechApiKey

```
private string _textToSpeechApiKey
```

Field Value

[string](#) 

Methods

CheckWebRequest(UnityWebRequest)

Checks the given UnityWebRequest for errors.

```
private void CheckWebRequest(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request to check.

Exceptions

[TextToSpeechRequestException](#)

Thrown if the request was not successful.

ConfirmResponse(UnityWebRequest)

Checks if the downloaded response was empty, as to be expected of some endpoints.

```
private void ConfirmResponse(UnityWebRequest request)
```

Parameters

request UnityWebRequest

The web request.

Exceptions

[TextToSpeechResponseParsingException](#)

Thrown if the response was not empty.

ConfirmResponse<TResponse>(UnityWebRequest)

Checks if the downloaded response was correct.

```
private TResponse ConfirmResponse<TResponse>(UnityWebRequest request)
```

Parameters

request UnityWebRequest

The web request.

Returns

TResponse

Type Parameters

TResponse

The expected response type.

Exceptions

[TextToSpeechResponseParsingException](#)

Thrown if the response could not be parsed.

Request<TResponse>(ITextToSpeechGetRequest)

Computes a GET request on the TTS API.

```
public Task<TResponse> Request<TResponse>(ITextToSpeechGetRequest request)
```

Parameters

request [ITextToSpeechGetRequest](#)

The request object.

Returns

[Task](#) <TResponse>

The computed response.

Type Parameters

TResponse

The response type. For example, a request of type [TextToSpeechSynthesisRequest](#) corresponds to a response type of [TextToSpeechSynthesisResponse](#).

Exceptions

[TextToSpeechRequestException](#)

Thrown if the API request fails.

[TextToSpeechResponseParsingException](#)

Thrown if the response could not be parsed.

Request<TResponse>(ITextToSpeechPostRequest)

Computes a POST request on the TTS API.

```
public Task<TResponse> Request<TResponse>(ITextToSpeechPostRequest request)
```

Parameters

request [ITextToSpeechPostRequest](#)

The request object.

Returns

[Task](#)  <TResponse>

The computed response.

Type Parameters

TResponse

The response type. For example, a request of type [TextToSpeechSynthesisRequest](#) corresponds to a response type of [TextToSpeechSynthesisResponse](#).

Exceptions

[TextToSpeechRequestException](#)

Thrown if the API request fails.

[TextToSpeechResponseParsingException](#)

Thrown if the response could not be parsed.

SetApiKey(string)

Sets the Text To Speech API key.

```
public void SetApiKey(string apiKey)
```

Parameters

apiKey [string](#)[↗]

The new API key.

SetupWebRequest(UnityWebRequest)

Sets up the UnityWebRequest with API keys and disposal settings.

```
private void SetupWebRequest(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request to set up.

Enum TextToSpeechVoiceGender

Namespace: [Uralstech.UCloud.TextToSpeech](#)

Gender of the voice as described in [SSML voice element](#)[↗].

```
public enum TextToSpeechVoiceGender
```

Fields

`Default = 0`

Default value. Do not use.

`[EnumMember(Value = "FEMALE")] Female = 3`

A female voice.

`[EnumMember(Value = "MALE")] Male = 2`

A male voice.

`[EnumMember(Value = "NEUTRAL")] Neutral = 4`

A gender-neutral voice. This voice is not yet supported.

`[EnumMember(Value = "SSML_VOICE_GENDER_UNSPECIFIED")] Unspecified = 1`

An unspecified gender.

Class TextToSpeechVoiceName

Namespace: [Uralstech.UCloud.TextToSpeech](#)

Denotes the name of a TTS voice by its separate parts.

```
public class TextToSpeechVoiceName
```

Inheritance

[object](#)  ← TextToSpeechVoiceName

Constructors

TextToSpeechVoiceName()


```
public TextToSpeechVoiceName()
```

TextToSpeechVoiceName(string)

```
public TextToSpeechVoiceName(string name)
```

Parameters

name [string](#) 

The name of the voice, in the format: "[[BCP-47](#)  language code]-[Type]-[ID]".

Fields

Id

The last part of the name, the single-character ID of the voice.

```
public char Id
```

Field Value

[char](#)

LanguageCode

The first part of the name, a [BCP-47](#) language code.

```
public string LanguageCode
```

Field Value

[string](#)

Type

The second part of the name, the type, e.g. Neural2, Journey.

```
public TextToSpeechVoiceType Type
```

Field Value

[TextToSpeechVoiceType](#)

Properties

FullName

The fully formatted name of the voice.

```
public string FullName { get; }
```

Property Value

[string](#)

Methods

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) 

A string that represents the current object.

Operators

implicit operator TextToSpeechVoiceName(string)

```
public static implicit operator TextToSpeechVoiceName(string value)
```

Parameters

value [string](#) 

Returns

[TextToSpeechVoiceName](#)

implicit operator string(TextToSpeechVoiceName)

```
public static implicit operator string(TextToSpeechVoiceName value)
```

Parameters

value [TextToSpeechVoiceName](#)

Returns


Class TextToSpeechVoiceNameStringConverter

Namespace: [Uralstech.UCloud.TextToSpeech](#)

Converter to convert [TextToSpeechVoiceName](#) to a string and vice-versa.

```
public class TextToSpeechVoiceNameStringConverter : JsonConverter<TextToSpeechVoiceName>
```

Inheritance

[object](#)  ← TextToSpeechVoiceNameStringConverter

Methods

ReadJson(JsonReader, Type, TextToSpeechVoiceName, bool, JsonSerializer)

```
public override TextToSpeechVoiceName ReadJson(JsonReader reader, Type objectType,
TextToSpeechVoiceName existingValue, bool hasExistingValue, JsonSerializer serializer)
```

Parameters

reader JsonReader

objectType [Type](#) 

existingValue [TextToSpeechVoiceName](#)

hasExistingValue [bool](#) 

serializer JsonSerializer

Returns

[TextToSpeechVoiceName](#)

WriteJson(JsonWriter, TextToSpeechVoiceName, JsonSerializer)

```
public override void WriteJson(JsonWriter writer, TextToSpeechVoiceName value,
    JsonSerializer serializer)
```

Parameters

writer `JsonWriter`

value [TextToSpeechVoiceName](#)

serializer `JsonSerializer`

Enum TextToSpeechVoiceType

Namespace: [Uralstech.UCloud.TextToSpeech](#)

The types of voices supported by the TTS API.

```
public enum TextToSpeechVoiceType
```

Fields

Casual = 7

[Casual](#)

Journey = 3

[Journey](#)

Neural2 = 2

[Neural2](#)

News = 6

[News](#)

Polyglot = 4

[Polyglot](#)

Standard = 0

[Standard](#)

Studio = 5

[Studio](#)

Wavenet = 1

[Wavenet](#)

Namespace Uralstech.UCloud.TextToSpeech. Exceptions

Classes

[TextToSpeechRequestException](#)

Thrown if a TTS API request fails.

[TextToSpeechResponseParsingException](#)

Thrown if the response of a TTS API request could not be parsed.

Class TextToSpeechRequestException

Namespace: [Uralstech.UCloud.TextToSpeech.Exceptions](#)

Thrown if a TTS API request fails.

```
public class TextToSpeechRequestException : Exception
```

Inheritance

[object](#)  ← [Exception](#)  ← TextToSpeechRequestException

Constructors

TextToSpeechRequestException(UnityWebRequest)

Creates a new [TextToSpeechRequestException](#).

```
internal TextToSpeechRequestException(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request that caused the exception.

Fields

IsBetaApi

Was the request on a beta API?

```
public bool IsBetaApi
```

Field Value

[bool](#) 

RequestEndpoint

The endpoint of the failed request.

```
public Uri RequestEndpoint
```

Field Value

[Uri](#)↗

RequestError

The name of the request's error.

```
public string RequestError
```

Field Value

[string](#)↗

RequestErrorCode

The response code returned by the request.

```
public long RequestErrorCode
```

Field Value

[long](#)↗

RequestErrorMessage

The request's error message.

```
public string RequestErrorMessage
```

Field Value

[string](#) 

Class TextToSpeechResponseParsingException

Namespace: [Uralstech.UCloud.TextToSpeech.Exceptions](#)

Thrown if the response of a TTS API request could not be parsed.

```
public class TextToSpeechResponseParsingException : Exception
```

Inheritance

[object](#)  ← [Exception](#)  ← TextToSpeechResponseParsingException

Constructors

TextToSpeechResponseParsingException(UnityWebRequest)

Creates a new [TextToSpeechResponseParsingException](#).

```
internal TextToSpeechResponseParsingException(UnityWebRequest webRequest)
```

Parameters

webRequest UnityWebRequest

The request that caused the exception.

TextToSpeechResponseParsingException(UnityWebRequest, Exception)

Creates a new [TextToSpeechResponseParsingException](#).

```
internal TextToSpeechResponseParsingException(UnityWebRequest webRequest,  
Exception innerException)
```

Parameters

webRequest UnityWebRequest

The request that caused the exception.

`innerException` [Exception](#)

The inner exception that caused this one.

Fields

DownloadedText

The content downloaded from the request.

```
public string DownloadedText
```

Field Value

[string](#)

IsBetaApi

Was the request on a beta API?

```
public bool IsBetaApi
```

Field Value

[bool](#)

RequestEndpoint

The endpoint of the request.

```
public Uri RequestEndpoint
```

Field Value

[Uri](#)

Namespace Uralstech.UCloud.TextToSpeech.Synthesis

Classes

[TextToSpeechCustomVoiceParameters](#)

Description of the custom voice to be synthesized.

[TextToSpeechSynthesisAudioConfiguration](#)

Description of audio data to be synthesized.

[TextToSpeechSynthesisInput](#)

Contains text input to be synthesized.

[TextToSpeechSynthesisRequest](#)

Request to synthesize audio from the given text. Response type is [TextToSpeechSynthesisResponse](#).

[TextToSpeechSynthesisResponse](#)

Response for a [TextToSpeechSynthesisRequest](#).

[TextToSpeechSynthesisTimePoint](#)

This contains a mapping between a certain point in the input text and a corresponding time in the output audio.

[TextToSpeechSynthesisVoiceSelection](#)

Description of which voice to use for a synthesis request.

[TextToSpeechSynthesizedAudioMetadata](#)

The audio metadata for [Audio](#).

Enums

[TextToSpeechSynthesisAudioEncoding](#)

Configuration to set up audio encoder. The encoding determines the output audio format that we'd like.

[TextToSpeechSynthesisProfile](#)

'audio effects' profiles that are applied on (post synthesized) text to speech.

[TextToSpeechSynthesisTimePointing](#)

The type of timepoint information that is returned in the response.

Class TextToSpeechCustomVoiceParameters

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Description of the custom voice to be synthesized.

```
public class TextToSpeechCustomVoiceParameters
```

Inheritance

[object](#)  ← TextToSpeechCustomVoiceParameters

Constructors

TextToSpeechCustomVoiceParameters(string)

```
public TextToSpeechCustomVoiceParameters(string model)
```

Parameters

model [string](#) 

See [Model](#).

Fields

Model

The name of the AutoML model that synthesizes the custom voice.

```
public string Model
```

Field Value

[string](#) 

Class


TextToSpeechSynthesisAudioConfiguration

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Description of audio data to be synthesized.

```
public class TextToSpeechSynthesisAudioConfiguration
```

Inheritance

[object](#)  ← TextToSpeechSynthesisAudioConfiguration

Constructors

TextToSpeechSynthesisAudioConfiguration()

```
public TextToSpeechSynthesisAudioConfiguration()
```

TextToSpeechSynthesisAudioConfiguration(TextToSpeechSynthesisAudioEncoding)

```
public TextToSpeechSynthesisAudioConfiguration(TextToSpeechSynthesisAudioEncoding encoding)
```

Parameters

encoding [TextToSpeechSynthesisAudioEncoding](#)

See [Encoding](#).

Fields

EffectsProfiles

'audio effects' profiles that are applied on (post synthesized) text to speech.

```
public TextToSpeechSynthesisProfile[] EffectsProfiles
```

Field Value

[TextToSpeechSynthesisProfile\[\]](#)

Remarks

Effects are applied on top of each other in the order they are given. See [audio profiles](#) for current supported profile ids.

Encoding

The format of the audio byte stream.

```
public TextToSpeechSynthesisAudioEncoding Encoding
```

Field Value

[TextToSpeechSynthesisAudioEncoding](#)

Pitch

Speaking pitch, in the range [-20.0, 20.0].

```
public float Pitch
```

Field Value

[float](#)

Remarks

20 means increase 20 semitones from the original pitch. -20 means decrease 20 semitones from the original pitch.

SampleRateHertz

The synthesis sample rate (in hertz) for this audio.

```
public int SampleRateHertz
```

Field Value

[int](#)

Remarks

When this is specified in [TextToSpeechSynthesisRequest](#), if this is different from the voice's natural sample rate, then the synthesizer will honor this request by converting to the desired sample rate (which might result in worse audio quality), unless the specified sample rate is not supported for the encoding chosen, in which case it will fail the request and return `google.rpc.Code.INVALID_ARGUMENT`.

SpeakingRate

Speaking rate/speed, in the range [0.25, 4.0].

```
public float SpeakingRate
```

Field Value

[float](#)

Remarks

1.0 is the normal native speed supported by the specific voice. 2.0 is twice as fast, and 0.5 is half as fast. If unset(0.0), defaults to the native 1.0 speed. Any other values < 0.25 or > 4.0 will return an error.

VolumeGainDb

Volume gain (in dB) of the normal native volume supported by the specific voice, in the range [-96.0, 16.0].

Field Value

[float](#)

Remarks

If unset, or set to a value of 0.0 (dB), will play at normal native signal amplitude. A value of -6.0 (dB) will, play at approximately half the amplitude of the normal native signal amplitude. A value of +6.0 (dB) will play, at approximately twice the amplitude of the normal native signal amplitude. Strongly recommend not to exceed +10, (dB) as there's usually no effective increase in loudness for any value greater than that.

Enum TextToSpeechSynthesisAudioEncoding

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Configuration to set up audio encoder. The encoding determines the output audio format that we'd like.

```
public enum TextToSpeechSynthesisAudioEncoding
```

Fields

```
[EnumMember(Value = "AUDIO_ENCODING_UNSPECIFIED")] Default = 0
```

Default value. Will return result `google.rpc.Code.INVALID_ARGUMENT`.

```
[EnumMember(Value = "MP3")] Mp3 = 2
```

MP3 audio at 32kbps.

```
[EnumMember(Value = "MP3_64_KBPS")] Mp3_64Kbps = 3
```

MP3 at 64kbps. Requires the beta API.

```
[EnumMember(Value = "OGG_OPUS")] OggOpus = 4
```

Opus encoded audio wrapped in an ogg container.

```
[EnumMember(Value = "ALAW")] WavALaw = 6
```

8-bit samples that compand 14-bit audio samples using G.711 PCMU/A-law. Audio content returned as ALAW also contains a WAV header.

This encoding is not supported by the plugin. You will have to convert the resulting bytes to an AudioClip yourself.

```
[EnumMember(Value = "LINEAR16")] WavLinear16 = 1
```

Uncompressed 16-bit signed little-endian samples (Linear PCM). Audio content returned as LINEAR16 also contains a WAV header.

```
[EnumMember(Value = "MULAW")] WavMuLaw = 5
```

8-bit samples that compand 14-bit audio samples using G.711 PCMU/mu-law. Audio content returned as MULAW also contains a WAV header.

This encoding is not supported by the plugin. You will have to convert the resulting bytes to an AudioClip yourself.

Class TextToSpeechSynthesisInput

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Contains text input to be synthesized.

```
public class TextToSpeechSynthesisInput
```

Inheritance

[object](#) ← TextToSpeechSynthesisInput

Remarks

Either [Text](#) or [Ssml](#) must be supplied. Supplying both or neither returns `google.rpc.Code.INVALID_ARGUMENT`. The input size is limited to 5000 bytes.

Constructors

TextToSpeechSynthesisInput()

```
public TextToSpeechSynthesisInput()
```

TextToSpeechSynthesisInput(string, bool)

```
public TextToSpeechSynthesisInput(string input, bool isSsml = false)
```

Parameters

input [string](#)

The input.

isSsml [bool](#)

Is the input SSML or normal text?

Fields

Ssml


The SSML document to be synthesized.

```
public string Ssml
```

Field Value

[string](#) 

Remarks

The SSML document must be valid and well-formed. Otherwise the RPC will fail and return `google.rpc.Code.INVALID_ARGUMENT`. For more information, see [SSML](#) .

Text

```
public string Text
```

Field Value

[string](#) 

Enum TextToSpeechSynthesisProfile

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

'audio effects' profiles that are applied on (post synthesized) text to speech.

```
public enum TextToSpeechSynthesisProfile
```

Fields

```
[EnumMember(Value = "handset-class-device")] Handset = 1
```

Optimized for smartphones, like Google Pixel, Samsung Galaxy, Apple iPhone.

```
[EnumMember(Value = "large-automotive-class-device")] LargeAutomotiveDevice = 5
```

Optimized for car speakers.

```
[EnumMember(Value = "large-home-entertainment-class-device")]
```

```
LargeHomeEntertainmentDevice = 4
```

Optimized for home entertainment systems or smart TVs, like Google Home Max, LG TV.

```
[EnumMember(Value = "medium-bluetooth-speaker-class-device")] MediumBluetoothSpeaker  
= 3
```

Optimized for smart home speakers, like Google Home.

```
[EnumMember(Value = "small-bluetooth-speaker-class-device")] SmallBluetoothSpeaker =  
2
```

Optimized for small home speakers, like Google Home Mini.

```
[EnumMember(Value = "telephony-class-application")] TelephonyApplication = 6
```

Optimized for Interactive Voice Response (IVR) systems.

```
[EnumMember(Value = "wearable-class-device")] Wearable = 0
```

Optimized for smart watches and other wearables, like Apple Watch, Wear OS watch.


Class TextToSpeechSynthesisRequest

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Request to synthesize audio from the given text. Response type is [TextToSpeechSynthesisResponse](#).

```
public class TextToSpeechSynthesisRequest : ITextToSpeechPostRequest, ITextToSpeechRequest
```

Inheritance

[object](#)  ← TextToSpeechSynthesisRequest

Implements

[ITextToSpeechPostRequest](#), [ITextToSpeechRequest](#)

Constructors

TextToSpeechSynthesisRequest(bool)

```
public TextToSpeechSynthesisRequest(bool useBetaApi = false)
```

Parameters

useBetaApi [bool](#) 

Should the request use the Beta API?

Fields

AudioConfiguration

The configuration of the synthesized audio.

```
public TextToSpeechSynthesisAudioConfiguration AudioConfiguration
```

Field Value

EnableTimePointing

Whether and what timepoints are returned in the response. Requires the beta API.

```
public TextToSpeechSynthesisTimePointing EnableTimePointing
```

Field Value

[TextToSpeechSynthesisTimePointing](#)

Input

The Synthesizer requires either plain text or SSML as input.

```
public TextToSpeechSynthesisInput Input
```

Field Value

[TextToSpeechSynthesisInput](#)

Voice

The desired voice of the synthesized audio.

```
public TextToSpeechSynthesisVoiceSelection Voice
```

Field Value

[TextToSpeechSynthesisVoiceSelection](#)

Properties

ContentType

The MIME type of the request content.

```
public string ContentType { get; }
```

Property Value

[string](#)

UriParent

The base endpoint URI + version.

```
public string UriParent { get; }
```

Property Value

[string](#)

Methods

GetEndpointUri()

Gets the URI to the API endpoint.

```
public string GetEndpointUri()
```

Returns

[string](#)

The URI.

GetUtf8EncodedData()

Converts the request object to a UTF-8 encoded [string](#).


```
public string GetUtf8EncodedData()
```

Returns

[string](#) 

The string data.

Class TextToSpeechSynthesisResponse

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Response for a [TextToSpeechSynthesisRequest](#).

```
public class TextToSpeechSynthesisResponse
```

Inheritance

[object](#)  ← TextToSpeechSynthesisResponse

Fields

Audio

The audio data bytes encoded as specified in the request, including the header for encodings that are wrapped in containers (e.g. MP3, OGG_OPUS).

```
public string Audio
```

Field Value

[string](#) 

Remarks

For LINEAR16 audio, we include the WAV header. Note: as with all bytes fields, protobuffers use a pure binary representation, whereas JSON representations use base64.

AudioMetadata

The audio metadata for [Audio](#). Only returned when using the beta API.

```
public TextToSpeechSynthesizedAudioMetadata AudioMetadata
```

Field Value

TimePoints

A link between a position in the original request input and a corresponding time in the output audio. It's only supported via <mark> of SSML input. Only returned when using the beta API.

```
public TextToSpeechSynthesisTimePoint[] TimePoints
```

Field Value

[TextToSpeechSynthesisTimePoint\[\]](#)


Methods

ToAudioClip()

Converts the base64 encoded audio to an AudioClip. Requires the the beta API.

```
public Task<AudioClip> ToAudioClip()
```

Returns

[Task](#)  <AudioClip>

The audio converted to an AudioClip.

Exceptions

[IOException](#) 

Thrown if **encoding** is unsupported.

ToAudioClip(TextToSpeechSynthesisAudioEncoding)

Converts the base64 encoded audio to an AudioClip.

```
public Task<AudioClip> ToAudioClip(TextToSpeechSynthesisAudioEncoding encoding)
```

Parameters

encoding [TextToSpeechSynthesisAudioEncoding](#)

The encoding of the audio.

Returns

[Task](#) [<AudioClip>](#)

The audio converted to an AudioClip.

Exceptions

[IOException](#)

Thrown if **encoding** is unsupported.

Class TextToSpeechSynthesisTimePoint

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

This contains a mapping between a certain point in the input text and a corresponding time in the output audio.

```
public class TextToSpeechSynthesisTimePoint
```

Inheritance

[object](#)  ← TextToSpeechSynthesisTimePoint

Fields

MarkName

Timepoint name as received from the client within <mark> tag.

```
public string MarkName
```

Field Value

[string](#) 

TimeSeconds

Time offset in seconds from the start of the synthesized audio.

```
public float TimeSeconds
```

Field Value

[float](#) 

Enum TextToSpeechSynthesisTimePointing

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

The type of timepoint information that is returned in the response.

```
public enum TextToSpeechSynthesisTimePointing
```

Fields

Default = 0

Default value. Do not use.

[EnumMember(Value = "SSML_MARK")] Ssm1Mark = 2

Timepoint information of <mark> tags in SSML input will be returned.

[EnumMember(Value = "TIMEPOINT_TYPE_UNSPECIFIED")] Unspecified = 1

Not specified. No timepoint information will be returned.


Class TextToSpeechSynthesisVoiceSelection

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

Description of which voice to use for a synthesis request.

```
public class TextToSpeechSynthesisVoiceSelection
```

Inheritance

[object](#)  ← TextToSpeechSynthesisVoiceSelection

Constructors

TextToSpeechSynthesisVoiceSelection()

```
public TextToSpeechSynthesisVoiceSelection()
```

TextToSpeechSynthesisVoiceSelection(string)

```
public TextToSpeechSynthesisVoiceSelection(string languageCode)
```

Parameters

languageCode [string](#) 

See [LanguageCode](#).

Fields

CustomVoiceParameters

The configuration for a custom voice.

```
public TextToSpeechCustomVoiceParameters CustomVoiceParameters
```

Field Value

[TextToSpeechCustomVoiceParameters](#)

Remarks

If [Model](#) is set, the service will choose the custom voice matching the specified configuration.

Gender

The preferred gender of the voice.

```
public TextToSpeechVoiceGender Gender
```

Field Value

[TextToSpeechVoiceGender](#)

Remarks

If not set, the service will choose a voice based on the other parameters such as [LanguageCode](#) and [Name](#). Note that this is only a preference, not requirement; if a voice of the appropriate gender is not available, the synthesizer should substitute a voice with a different gender rather than failing the request.

LanguageCode

The language (and potentially also the region) of the voice expressed as a [BCP-47](#) [language tag](#), e.g. "en-US".

```
public string LanguageCode
```

Field Value

[string](#) [↗](#)

Remarks

This should not include a script tag (e.g. use "cmn-cn" rather than "cmn-Hant-cn"), because the script will be inferred from the input provided in the [TextToSpeechSynthesisInput](#).

The TTS service will use this parameter to help choose an appropriate voice. Note that the TTS service may choose a voice with a slightly different language code than the one selected; it may substitute a different region (e.g. using en-US rather than en-CA if there isn't a Canadian voice available), or even a different language, e.g. using "nb" (Norwegian Bokmal) instead of "no" (Norwegian)".

Name

The name of the voice.

```
public TextToSpeechVoiceName Name
```

Field Value

[TextToSpeechVoiceName](#)

Remarks

If both this and [Gender](#) are not set, the service will choose a voice based on the other parameters such as [LanguageCode](#).


Class TextToSpeechSynthesizedAudioMetadata

Namespace: [Uralstech.UCloud.TextToSpeech.Synthesis](#)

The audio metadata for [Audio](#).

```
public class TextToSpeechSynthesizedAudioMetadata
```

Inheritance

[object](#)  ← TextToSpeechSynthesizedAudioMetadata

Fields

Encoding

The format of the audio byte stream.

```
public TextToSpeechSynthesisAudioEncoding Encoding
```

Field Value

[TextToSpeechSynthesisAudioEncoding](#)

SampleRateHertz

The synthesis sample rate (in hertz) for this audio.

```
public int SampleRateHertz
```

Field Value

[int](#) 

Namespace Uralstech.UCloud.TextToSpeech.Voices

Classes

[IEnumerableExtensions](#)

Extensions for [IEnumerable<T>](#) .

[TextToSpeechVoice](#)

Description of a voice supported by the TTS service.

[TextToSpeechVoiceListRequest](#)

Returns a list of Voice supported for synthesis. Response type is [TextToSpeechVoiceListResponse](#).

[TextToSpeechVoiceListResponse](#)

Response for a [TextToSpeechVoiceListRequest](#).

Class IEnumerableExtensions

Namespace: [Uralstech.UCloud.TextToSpeech.Voices](#)

Extensions for [IEnumerable<T>](#).

```
public static class IEnumerableExtensions
```

Inheritance

[object](#) ← [IEnumerableExtensions](#)

Methods

[FilterByAttributes\(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceGender, TextToSpeechVoiceType\)](#)

Finds the voices with the given **gender** and **type** from the current collection.

```
public static IEnumerable<TextToSpeechVoice> FilterByAttributes(this  
IEnumerable<TextToSpeechVoice> this, TextToSpeechVoiceGender gender,  
TextToSpeechVoiceType type)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

gender [TextToSpeechVoiceGender](#)

The gender of the voice.

type [TextToSpeechVoiceType](#)

The type of the voice.

Returns

[IEnumerable](#) <[TextToSpeechVoice](#)>

Voices with the type and gender corresponding to **type** and **gender**.

FilterByGender(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceGender)

Finds the voices with the given **gender** from the current collection.

```
public static IEnumerable<TextToSpeechVoice> FilterByGender(this  
IEnumerable<TextToSpeechVoice> this, TextToSpeechVoiceGender gender)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

gender [TextToSpeechVoiceGender](#)

The gender of the voice.

Returns

[IEnumerable](#) <[TextToSpeechVoice](#)>

Voices with the gender corresponding to **gender**.

FilterByType(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceType)

Finds the voices with the given **type** from the current collection.

```
public static IEnumerable<TextToSpeechVoice> FilterByType(this  
IEnumerable<TextToSpeechVoice> this, TextToSpeechVoiceType type)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

type [TextToSpeechVoiceType](#)

The type of the voice.

Returns

[IEnumerable](#) <[TextToSpeechVoice](#)>

Voices with the type corresponding to **type**.

FindByAttributes(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceGender, TextToSpeechVoiceType)

Finds the voice with the given **gender** and **type** from the current collection.

```
public static TextToSpeechVoice FindByAttributes(this IEnumerable<TextToSpeechVoice> this,
TextToSpeechVoiceGender gender, TextToSpeechVoiceType type)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

gender [TextToSpeechVoiceGender](#)

The gender of the voice.

type [TextToSpeechVoiceType](#)

The type of the voice.

Returns

[TextToSpeechVoice](#)

A voice with the type and gender corresponding to **type** and **gender**, [null](#) if not found.

FindByGender(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceGender)

Finds the voice with the given **gender** from the current collection.

```
public static TextToSpeechVoice FindByGender(this IEnumerable<TextToSpeechVoice> this,
TextToSpeechVoiceGender gender)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

gender [TextToSpeechVoiceGender](#)

The gender of the voice.

Returns

[TextToSpeechVoice](#)

A voice with the gender corresponding to **gender**, [null](#) if not found.

FindByName(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceName)

Finds the voice with the given **name** from the current collection.

```
public static TextToSpeechVoice FindByName(this IEnumerable<TextToSpeechVoice> this,
TextToSpeechVoiceName name)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

name [TextToSpeechVoiceName](#)

The name of the voice.

Returns

[TextToSpeechVoice](#)

A voice with the name corresponding to **name**, [null](#) if not found.

FindByType(IEnumerable<TextToSpeechVoice>, TextToSpeechVoiceType)

Finds the voice with the given **type** from the current collection.

```
public static TextToSpeechVoice FindByType(this IEnumerable<TextToSpeechVoice> this,
TextToSpeechVoiceType type)
```

Parameters

this [IEnumerable](#) <[TextToSpeechVoice](#)>

type [TextToSpeechVoiceType](#)

The type of the voice.

Returns

[TextToSpeechVoice](#)

A voice with the type corresponding to **type**, [null](#) if not found.


Class TextToSpeechVoice

Namespace: [Uralstech.UCloud.TextToSpeech.Voices](#)

Description of a voice supported by the TTS service.

```
public class TextToSpeechVoice
```

Inheritance

[object](#)  ← TextToSpeechVoice

Fields

Gender

The gender of this voice.

```
public TextToSpeechVoiceGender Gender
```

Field Value

[TextToSpeechVoiceGender](#)

Name

The name of this voice. Each distinct voice has a unique name.

```
public TextToSpeechVoiceName Name
```

Field Value

[TextToSpeechVoiceName](#)

NaturalSampleRateHertz

The natural sample rate (in hertz) for this voice.

```
public int NaturalSampleRateHertz
```

Field Value

[int](#)

SupportedLanguages

The languages that this voice supports, expressed as [BCP-47](#) language tags (e.g. "en-US", "es-419", "cmn-tw").

```
public string[] SupportedLanguages
```

Field Value

[string](#)[]


Class TextToSpeechVoiceListRequest

Namespace: [Uralstech.UCloud.TextToSpeech.Voices](#)

Returns a list of Voice supported for synthesis. Response type is [TextToSpeechVoiceListResponse](#).

```
public class TextToSpeechVoiceListRequest : ITextToSpeechGetRequest, ITextToSpeechRequest
```

Inheritance

[object](#)  ← TextToSpeechVoiceListRequest

Implements

[ITextToSpeechGetRequest](#), [ITextToSpeechRequest](#)

Constructors

TextToSpeechVoiceListRequest(string, bool)

```
public TextToSpeechVoiceListRequest(string languageCode = null, bool useBetaApi = false)
```

Parameters

languageCode [string](#) 


See [LanguageCode](#).

useBetaApi [bool](#) 

Should the request use the Beta API?

Fields

LanguageCode

[BCP-47](#)  language tag.

```
public string LanguageCode
```

Field Value

[string](#)

Remarks

If not specified, the API will return all supported voices. If specified, the request call will only return voices that can be used to synthesize this language. For example, if you specify "en-NZ", all "en-NZ" voices will be returned. If you specify "no", both "no-*" (Norwegian) and "nb-*" (Norwegian Bokmal) voices will be returned.

Properties

UriParent

The base endpoint URI + version.

```
public string UriParent { get; }
```

Property Value

[string](#)

Methods

GetEndpointUri()

Gets the URI to the API endpoint.

```
public string GetEndpointUri()
```

Returns

[string](#)

The URI.


Class TextToSpeechVoiceListResponse

Namespace: [Uralstech.UCloud.TextToSpeech.Voices](#)

Response for a [TextToSpeechVoiceListRequest](#).

```
public class TextToSpeechVoiceListResponse
```

Inheritance

[object](#)  ← TextToSpeechVoiceListResponse

Fields

Voices

The list of voices.

```
public TextToSpeechVoice[] Voices
```

Field Value

[TextToSpeechVoice](#)[]