

RT-Voice PRO

Hearing is understanding



Documentation

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<https://www.crosstales.com>

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Thank you for buying our asset "RT-Voice PRO"!

If you have any questions about this asset, send us an email at rtvoice@crosstales.com. Please don't forget to rate it or write a little review – it would be very much appreciated.

1. Overview

Did you ever want to make a game for people with **visual impairments** or **reading difficulties**? Or want your players to **not have to read too much**? Or would you listen to just the dialogues in your game **without consulting a voice-actor** in early stages of development? Then RT-Voice is your **time-saving** solution to do so!

RT-Voice uses TTS-voices already integrated in your system to pronounce any written text at runtime.

All of this happens without intermediate steps: the transformation effects **instantaneously** - and, if needed, **simultaneously**!

2. Features

2.1. Convert text to voice

- **Instant conversion** from text to speech - generated **during runtime!**
- **Side effect:** the continuous audio generation **saves a lot of memory**
- **No need for voice actors** during the testing phase of your game
- Filter voices by **name**, **culture** and/or **gender**
- **Several voices at once** are possible (e.g. for scenes in a public place, where many people are talking at the same time)
- **Fine tuning** for your voices with **speed**, **pitch** and **volume**
- Support for [SSML](#) and [EmotionML](#)
- **Current word**, **visemes** and **phomenes** on Windows and iOS - including **marker functions**
- Generated audio **can be stored** in files reusable within Unity
- **1-infinite synchronized speakers** for a single AudioSource
- Simple **sequence** and **dialogue system**
- **No** performance drops
- Components to speak UI-elements, like **Text** and **InputField**
- Enables access to more than **1'000 voices**

2.2. Documentation & control

- **Test** all **voices** within the **editor**
- Powerful [API](#) for **maximum control**
- Detailed **demo scenes**
- Comprehensive [documentation](#) and **support**
- Full **source code** (including libraries)

2.3. Compatibility

- Supports **all build platforms**
- **Native providers** for **Windows**, **macOS**, **Android**, **iOS** and **XBox**
- Compatible with:
 - [AWS Polly](#)
 - [Azure \(Bing Speech\)](#)
 - [MaryTTS](#)
 - [eSpeak](#) and [eSpeak-NG](#)
 - [Klattersynth](#)
 - [WebGL Speech Synthesis](#)
 - [Google Cloud Speech](#)
- Works with **Windows**, **Mac** and **Linux editors**
- Compatible with **Unity 2018.4 – 2022**
- Supports **AR** and **VR**
- **C# delegates** and **Unity events**
- Works with [Online Check](#)
- [PlayMaker](#) actions

2.4. Integrations

- [Adventure Creator](#)
- [Amplitude](#)
- [Cinema Director](#)
- [Dialogue System for Unity](#)
- [Google Cloud Speech](#)
- [Klattersynth](#)
- [LipSync](#)
- [Localized Dialogs & Cutscenes \(LDC\)](#)
- [Naninovel](#)
- [NPC Chat](#)
- [Online Check](#)
- [PlayMaker](#)
- [Quest System Pro](#)
- [SALSA](#)
- [SLATE](#)
- [Volumetric Audio](#)
- [WebGL Speech Synthesis](#)

2.5. Platform-specific features and limitations

2.5.1. Overview

| Provider | Offline | SSML | Audio files | Words |
|--|-----------------|------------------|-------------|-------|
| Windows | yes | yes | yes | yes |
| macOS | yes | no | yes | no |
| Android | yes | yes ¹ | yes | no |
| iOS | yes | no | no | yes |
| WSA (UWP) / XBox | yes | yes | yes | no |
| MaryTTS | no ² | yes | yes | no |
| eSpeak | yes | yes | yes | no |
| AWS Polly | no | yes | yes | no |
| Klattersynth | yes | no | no | no |
| SAPI Unity | yes | yes | no | no |
| WebGL Speech Synthesis | no | no | no | no |
| Azure (Bing Speech) | no | yes | yes | no |
| Google Cloud Speech | no | yes | yes | no |

2.5.2. Windows

- Native rate is internally limited to 20 logarithmic distributed steps
- .NET 4.0 or higher must be installed
- Minimum Windows version: 7
- Maximal number of characters per speech: 32'000 (>35min)

Important note: not all SAPI-voices support SSML! If you experience a wrong voice speaking your text, the selected voice is most likely not SSML-compatible. In this case, remove all SSML-tags from your text and let RTV speak again or you could enable *Auto Clear Tags* on the Speaker-component.

2.5.3. macOS

- Native pitch has no effect
- Native volume has no effect
- Minimum macOS version: 10.6
- Maximal number of characters per speech: 256'000 (>4h 45min)

¹ Since Android M (API level 23)

² Standalone: MaryTTS could be bundled with the app installer and run locally

2.5.4. Android

- Only one native voice at the time (can be solved by generating audio)
- Volume has no effect for generated audio (can be adjusted via AudioSource)
- Minimum Android version: 4.0.3 (API 15) – SSML needs 6.0 (API 23) and higher
- Maximal number of characters per speech: 3'999 (>5min)

2.5.5. iOS

- Only one active native voice at the time
- Current word but no phonemes and visemes
- Minimum iOS-version: 9.0
- Maximal number of characters per speech: n/a

2.5.6. WSA (UWP) / Xbox

- No native audio (only generated audio files)
- Minimum SDK-version: 10.0
- Maximal number of characters per speech: 64'000 (>1h 15min)

2.5.7. MaryTTS

- Platforms: all
- Support for RAWMARYXML, SSML and EmotionML
- No native audio (only generated audio files)
- Minimum MaryTTS-version: 5.0
- Maximal number of characters per speech: depends on the server request size, but 8'000 (>10min) is realistic. Higher numbers can lead to timeouts.

2.5.8. eSpeak

- Platforms: Windows, macOS, Linux and Android
- Minimum eSpeak version: 1.4.0
- Maximal number of characters per speech: 32'000 (>30min)

Important note: eSpeak must be installed on the target machine; see chapter 7.

2.5.9. AWS Polly

- Platforms: all except WebGL
- No native audio (only generated audio files)
- Maximal number of characters per speech: depends on the maximal request size, but 16'000 (>20min) is realistic. Higher numbers can lead to timeouts.

2.5.10. Klattersynth

- Platforms: all
- Unity AssetStore: <https://assetstore.unity.com/packages/slug/95453>
- Maximal number of characters per speech: 2'150 (>3min)

2.5.11. SAPI Unity

- Platforms: Windows standalone (IL2CPP)
- Only one active native voice at the time
- Native rate is internally limited to 20 logarithmic distributed steps
- Maximal number of characters per speech: 256'000 (>4h 45min)

2.5.12. WebGL Speech Synthesis

- Platforms: WebGL and Standalone
- Unity AssetStore: <https://assetstore.unity.com/packages/slug/81861>
- Maximal number of characters per speech: 32'000 (>30min)

2.5.13. Azure (Bing Speech)

- Platforms: all except WebGL
- No native audio (only generated audio)
- Maximal number of characters per speech: depends on the maximal request size, but 16'000 (>20min) is realistic. Higher numbers can lead to timeouts.

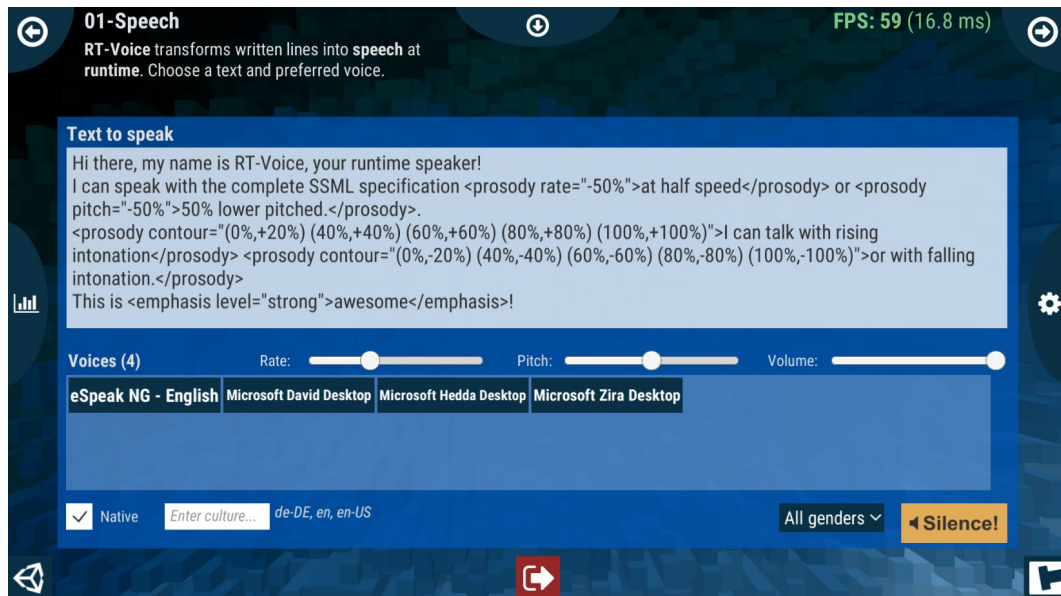
2.5.14. Google Cloud Speech

- Platforms: all
- Unity AssetStore: <https://assetstore.unity.com/packages/slug/115170>
- Maximal number of characters per speech: depends on the maximal request size, but 16'000 (>20min) is realistic. Higher numbers can lead to timeouts.

3. Demonstration

The asset comes with many demo scenes to show the main usage.

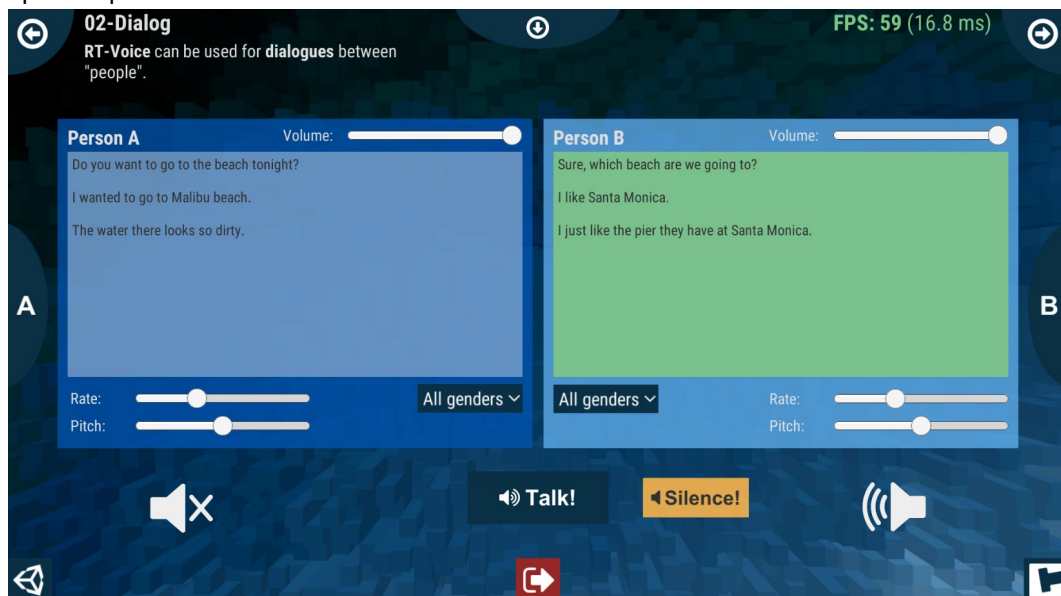
3.1. Speech



This demo scene shows how to transform written lines into speech. Choose the preferred voice.

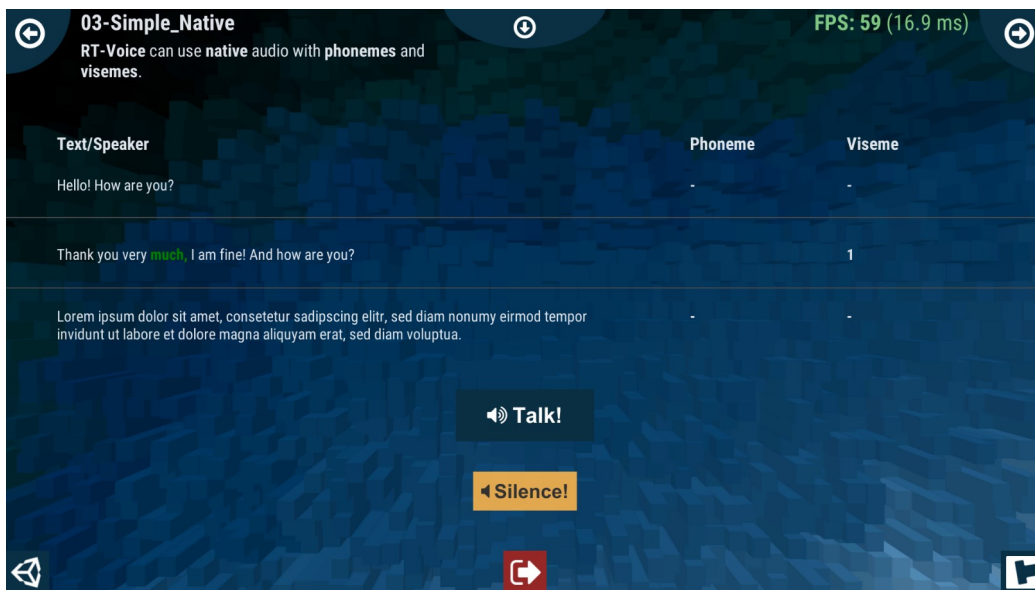
3.2. Dialog

In this demo scene acts out a dialogue between two "people". Choose a different voice for both participants.



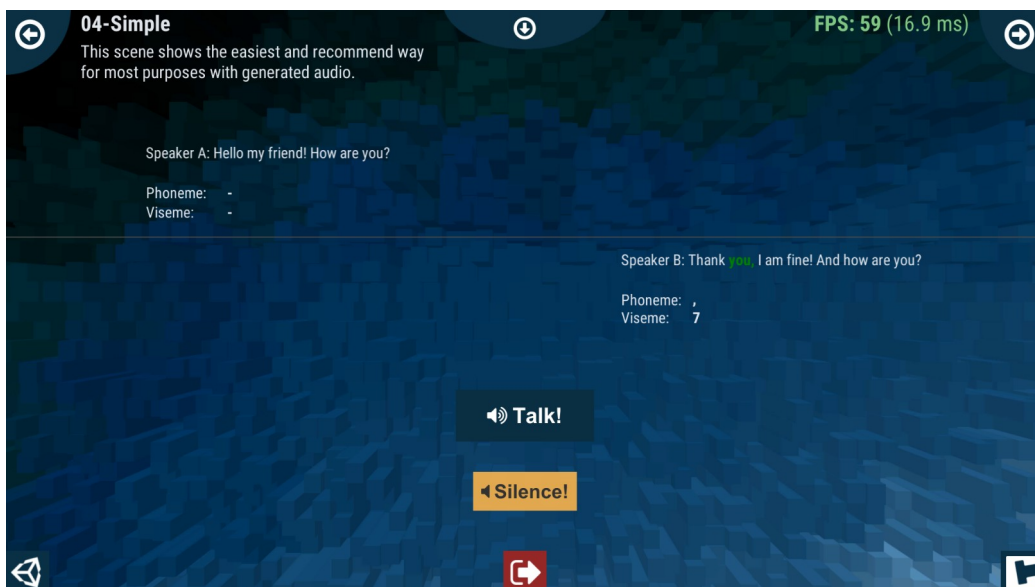
3.3. SimpleNative

The "SimpleNative" scene shows the easiest way for native audio.



3.4. Simple

The "Simple" scene shows the easiest and recommended way for most purposes with generated audio.



3.5. 3DAudio

This scene demonstrates 3D positioned and looped audio.

Needs the [Unity Standard Assets](#)-package.

3.6. Loudspeakers

This scene demonstrates 3D positioned loudspeakers with only one audio origin (looped).

Needs the [Unity Standard Assets](#)-package.

3.7. SendMessage

This scene shows the usage of Unity's "SendMessage".

3.8. Sequencer

This scene shows the usage of our simple sequencer.

3.9. Exact and Exact_Native

These two scenes are showing how to build applications with exact timing between audio and animations (e.g. lip sync).

3.10. SpeechText

This scene shows how to speak or store generated audio (see the result inside the folder "_generatedAudio").

3.11. SpeechText

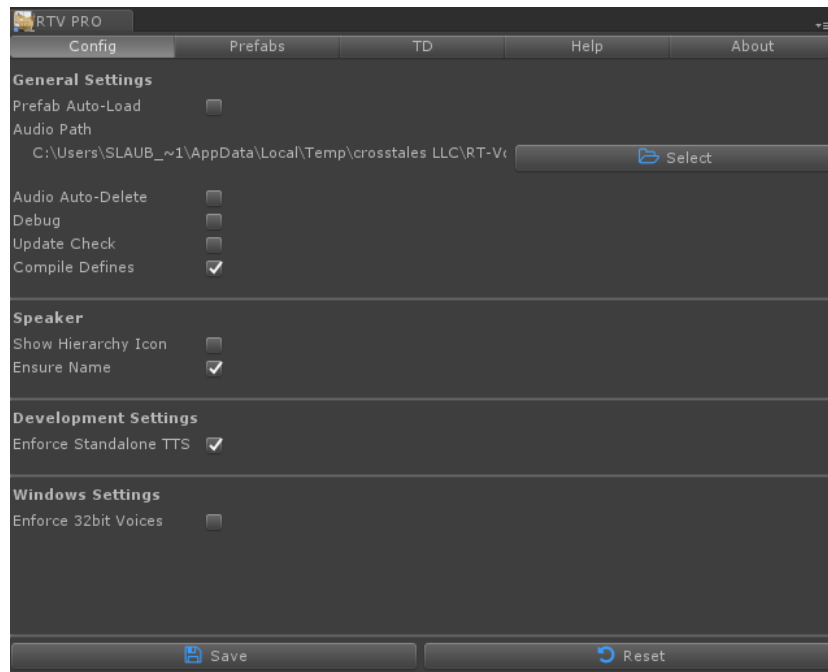
This scene shows how to speak text files with a voice (e.g. random dialogues of NPCs).

3.12. AudioFileGenerator

This scene shows how-to generate audio files from text files.

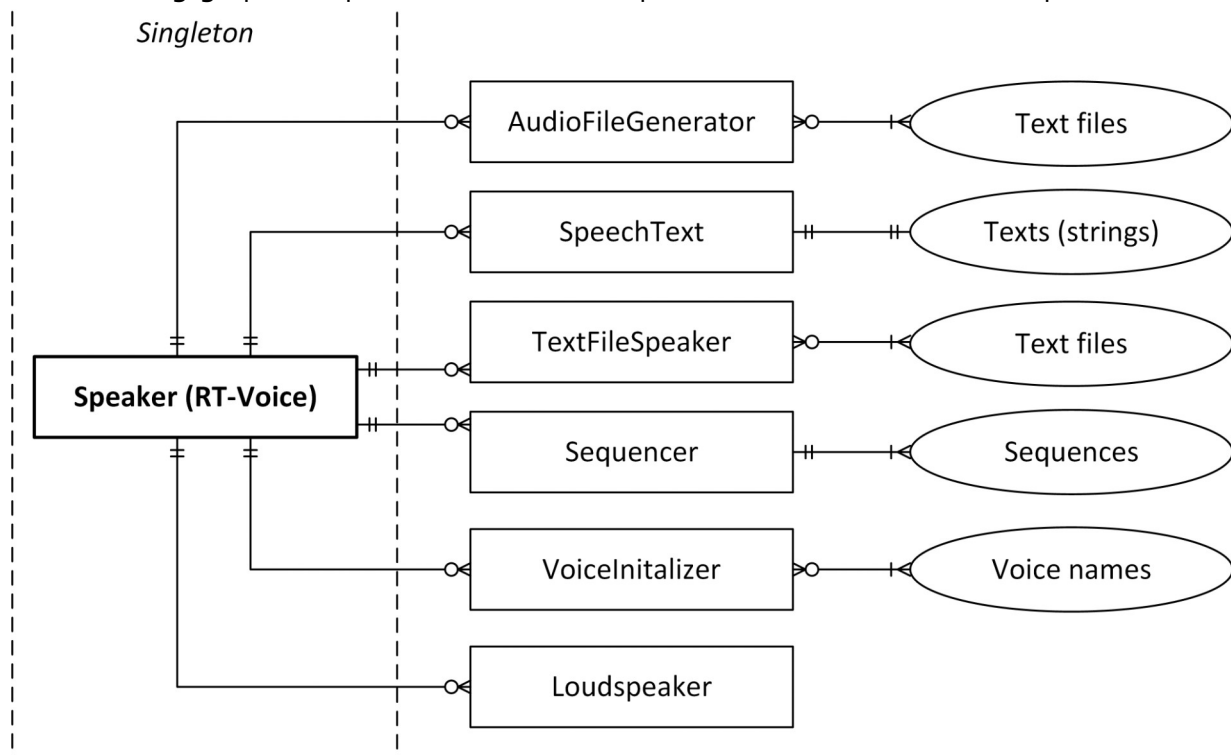
4. Setup

RT-Voice has global settings under "Edit\Preferences..." and under "Tools\RTVoice PRO\ Configuration...":



4.1. Schema

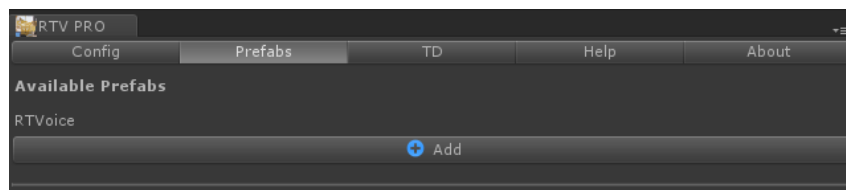
The following graphic explains the relationships between all relevant components:



4.2. Add RT-Voice

There are four ways to add RT-Voice to the project:

1. Add the prefab **RTVoice** from Assets/Plugins/crosstales/RTVoice/Resources/Prefabs to the scene
2. Or go to *Tools => RTVoice PRO => Prefabs => RTVoice*
3. Right-click in the *hierarchy-window => RTVoice PRO => RTVoice*
4. Add it from the Prefabs-tab:



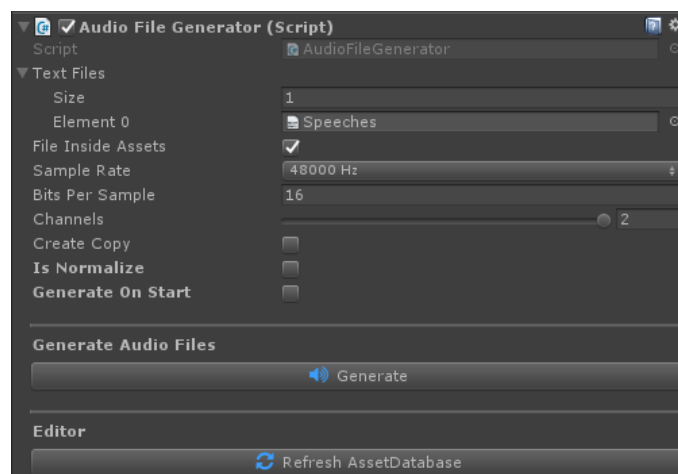
4.3. Other components

The other components can be added in the same way as "RTVoice".

4.3.1. AudioFileGenerator

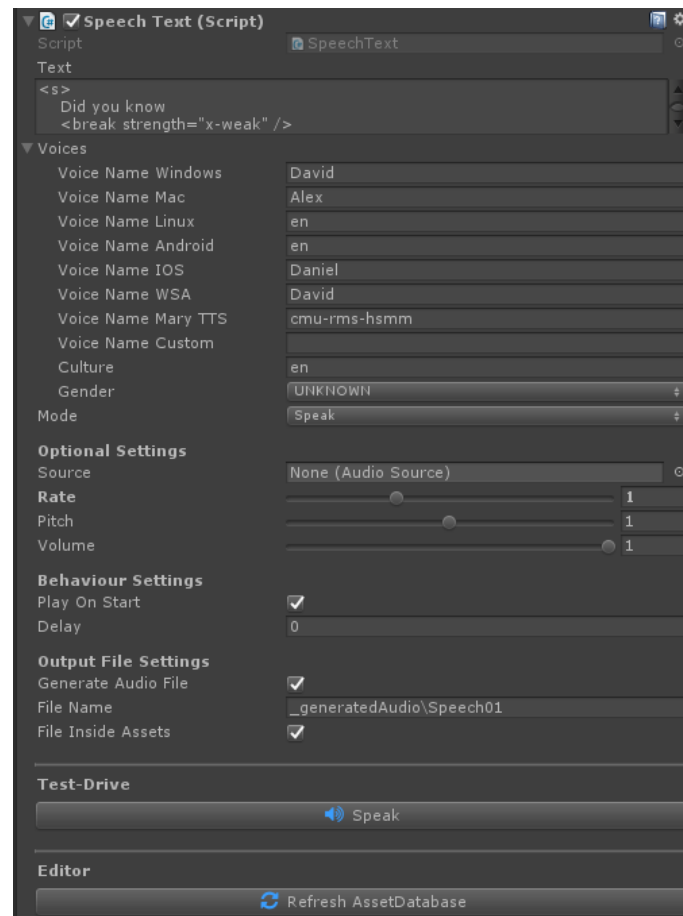
This scene generates audio files from text files with lines like:

```
#Text;Output file (without extension);Voice name;Rate;Pitch;Volume  
This is a test speech;Speeches\Mary01;cmu-slt-hsmm;1.2;0.85;0.95
```



4.3.2. SpeechText

Allows to speak and store generated audio.



4.3.3. Sequencer

Simple sequencer for dialogues.

4.3.4. Loudspeaker

Loudspeaker for an AudioSource.

This is useful to use a speech on multiple locations in the game.

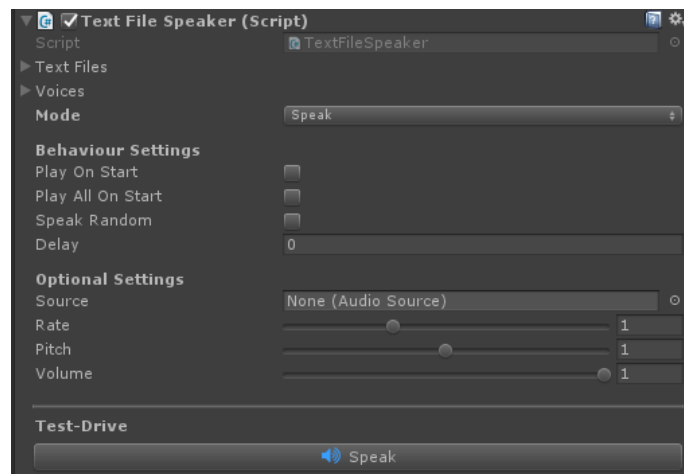
4.3.5. VoiceInitializer

This component allows to initialize voices to provide lag-free speeches. It's especially useful for Android.

Add it together with RT-Voice to the first scene (e.g. splash screen).

4.3.6. TextFileSpeaker

Allows to speak text files.



4.3.7. Paralanguage

Paralanguage allows to use sounds inside a speech:



It works like this: add 1-n audio clips (names without spaces). Then add text and fill in the desired clips with the # as pre- and postfix.

4.3.8. GlobalCache

Caches speeches with a given voice to save time and performance (and bandwidth if an online provider is used).

It also allows to persist the generated speeches if the application is closed and re-uses them for the next run.

4.3.9. PlatformProvider

This component allows to use a specific provider per platform, e.g. MaryTTS for WebGL

4.4. Differences between standard and native mode

In the **standard** mode the TTS-system of the OS will **convert** text to an **audio** file and return it to **Unity** as an "**AudioSource**" for further use (like changing the volume, pitch etc.).

On the other hand, the **native** mode **delegates** the speech-task **entirely** to the underlying TTS-system (outside of Unity). It offers less **control** but it uses slightly **less performance**.

We clearly **recommend** using the **standard** mode.

4.5. Speaker.cs vs. LiveSpeaker.cs

"Speaker.cs" is the main class of RT-Voice and presents the API via methods.

"LiveSpeaker.cs" on the other hand is a wrapper for "Speaker.cs" and presents the API as normal C#-instance via public methods. The main usage of "LiveSpeaker.cs" is as a receiver for "SendMessage"-calls.

4.6. MaryTTS

MaryTTS is an open-source TTS with a server, client and many voices.

It enables TTS under all Unity platforms.

Customize everything by yourself, just follow their guides:

<http://mary.dfki.de/>

To enable MaryTTS, simply check "MaryTTS" in the RTVoice-component and configure the URL and port.

4.6.1. Important

The default server in RT-Voice is the test server from MaryTTS.

Never release a product with the **default configuration** and install your own server (local/remote)!

4.6.2. Account for our MaryTTS-service

We offer a service for MaryTTS. It's currently free and in early beta-stage, this means it could be sometimes slow or unavailable.

If you're interested in getting a test account, [contact us](#).

4.6.3. Installation guide

We created a guide which should help installing a MaryTTS-server with HTTPS (needed for the WebGL-platform).

It can be found under "Assets/crosstales/RTVoice/Documentation/MaryTTS.pdf".

5. API

The asset contains various classes and methods. The most important are explained here. Make sure to **include** the **name space** in the relevant source files:

```
using Crosstales.RTVoice;
```

5.1. Speaker

The "Speaker.cs" is a singleton and contains the following important methods.

5.1.1. Speak

Speaks a text with a given voice and optional AudioSource.

For example:

```
//Immediately speak "hello world" with the first available voice  
Speaker.Instance.Speak("hello world", audioSource);
```

```
//Immediately speak "hello world" with the first English voice (if available  
else it uses the first voice on the OS)  
Speaker.Instance.Speak("hello world", audioSource,  
Speaker.Instance.VoiceForCulture("en"));
```

```
// Prepare speak "hello world" with the first available voice (without  
AudioSource.Play() - this is up to you). With this technique, all audio texts  
of a scene can be created in advance and the AudioSource can be modified in  
various ways  
Speaker.Instance.Speak("hello world", audioSource, null, false);
```

5.1.2. SpeakNative

Speaks a text with a given voice.

For example:

```
//Speak "hello world" with the first available voice  
Speaker.Instance.SpeakNative("hello world");
```

```
//Speak "hello world" with the first English voice (if available else it uses  
the first voice on the OS)
```

```
Speaker.Instance.SpeakNative("hello world",  
Speaker.Instance.VoiceForCulture("en"));
```

5.1.3. Silence

Silence all active TTS-voices.

Example:

```
//silence all voices  
Speaker.Instance.Silence();
```

5.1.4. Voices

```
List<Voice> Voices
```

Returns all available voices (alphabetically ordered by 'Name').

5.1.5. VoicesForGender

```
List<Voice> VoicesForGender(Model.Enum.Gender gender, string culture)
```

Returns all available voices for a given gender and optional culture (alphabetically ordered by 'Name').

5.1.6. VoiceForGender

```
Voice VoiceForGender(Model.Enum.Gender gender, string culture, int index,  
string fallbackCulture)
```

Returns a voice for the given gender and optional culture/index/fallbackCulture.

5.1.7. VoicesForCulture

```
List<Voice> VoicesForCulture(string culture)
```

Returns all available voices for a given culture (alphabetically ordered by 'Name').

5.1.8. VoiceForCulture

`voice voiceForCulture(string culture, int index, string fallbackCulture)`

Returns a voice for the given culture and optional index/fallbackCulture.

5.1.9. VoiceForName

`Voice voiceForName(string name)`

Returns the voice for the given name or null if not found.

5.1.10. Cultures

`List<string> cultures`

Returns all available cultures (alphabetically ordered by 'Culture').

5.2. Callbacks

There are various callbacks available. Subscribe them in the "Start"-method and unsubscribe in "OnDestroy".

5.2.1. Voices ready

```
VoicesReady();
```

```
VoicesReady OnVoicesReady;
```

Triggered as soon as the voices of a provider are ready to use.

5.2.2. Speak start and complete

```
SpeakStart(wrapper wrapper);
```

```
SpeakStart OnSpeakStart;
```

Triggered whenever a speak is started.

```
SpeakComplete(wrapper wrapper);
```

```
SpeakComplete OnSpeakComplete;
```

Triggered whenever a native speak is completed.

5.2.1. Current word (native, Windows and iOS only)

```
SpeakCurrentWord(wrapper wrapper, string[] speechTextArray, int wordIndex);
```

```
SpeakCurrentWord OnSpeakCurrentWord;
```

Triggered whenever a new word is spoken (native, Windows and iOS only).

5.2.2. Current phoneme (native, Windows only)

```
SpeakCurrentPhoneme(wrapper wrapper, string phoneme);
```

```
SpeakCurrentPhoneme OnSpeakCurrentPhoneme;
```

Triggered whenever a new phoneme is spoken (native mode, Windows only).

5.2.3. Current viseme (native, Windows only)

```
SpeakCurrentViseme(wrapper wrapper, string viseme);
```

```
SpeakCurrentViseme OnSpeakCurrentViseme;
```

Triggered whenever a new viseme is spoken (native mode, Windows only).

5.2.4. Speak audio generation start and complete

`SpeakAudioGenerationStart(wrapper wrapper);`

`SpeakAudioGenerationStart` **`OnSpeakAudioGenerationStart`**;

Triggered whenever a speak audio generation is started.

`SpeakAudioGenerationComplete(wrapper wrapper);`

`SpeakAudioGenerationComplete` **`OnSpeakAudioGenerationComplete`**;

Triggered whenever a speak audio generation is completed.

5.2.5. Provider change

`ProviderChange(string provider);`

`ProviderChange` **`OnProviderChange`**;

Triggered whenever a provider changes (e.g. from Windows to MaryTTS).

5.2.6. Errors

`ErrorInfo(string info);`

`ErrorInfo` **`OnErrorInfo`**;

Triggered whenever an error occurs.

5.2.7. Example

Wait until all voices are ready. Then speak the text and get informed when it starts and completes:

```
using UnityEngine;
using Crosstales.RTVoice;
using Crosstales.RTVoice.Model;

public class SimpleExample : MonoBehaviour {
    public void OnEnable() {
        // Subscribe event listeners
        Speaker.Instance.OnVoicesReady += voicesReady;
        Speaker.Instance.OnSpeakStart += speakStart;
        Speaker.Instance.OnSpeakComplete += speakComplete;
    }

    public void OnDisable() {
        // Unsubscribe event listeners
        Speaker.Instance.OnVoicesReady -= voicesReady;
        Speaker.Instance.OnSpeakStart -= speakStart;
        Speaker.Instance.OnSpeakComplete -= speakComplete;
    }

    private void voicesReady() {
        Debug.Log("Voices are ready!");
        Speaker.Instance.SpeakNative("Hello world!");
    }

    private void speakStart(wrapper wrapper) {
        Debug.Log("speakStart: " + wrapper);
    }

    private void speakComplete(wrapper wrapper) {
        Debug.LogWarning("speakComplete: " + wrapper);
    }
}
```

5.3. Complete API

For more details, please see the [RTVoice-api.pdf](#)

6. Additional voices

RT-Voice works great with third-party voices (e.g. [Cereproc](#)).

6.1. Windows

All SAPI5-compatible voices are supported. Microsoft also provides a wide range of voices for different languages:

<https://support.microsoft.com/en-us/topic/how-to-download-text-to-speech-languages-for-windows-10-d5a6b612-b3ae-423f-afa5-4f6caf1ec5d3?ui=en-us&rs=en-us&ad=us>

There are many free and commercial voices available. Here is a site with more than 36 free voices in 13 languages:

<https://zero2000.com/free-text-to-speech-natural-voices.html>

6.2. macOS

Apple delivers many voices for different languages. To add or customize them, follow the tutorial below:

<http://osxdaily.com/2011/07/25/how-to-add-new-voices-to-mac-os-x/>

6.3. Android

Follow the link to add various voices on an Android phone:

<http://hyperionics.com/TtsSetup/eng/TtsInfo.html>

6.4. iOS

Follow the link to change the quality of the installed voices:

<https://support.apple.com/en-us/HT202362>

6.5. WSA (UWP) / Xbox

See 6.1.

6.6. MaryTTS

<http://mary.dfki.de/>

6.7. eSpeak

<http://espeak.sourceforge.net/languages.html>

7. Setup eSpeak

eSpeak and esSpeak-NG are open-source TTS solutions that work under Windows, macOS, Linux and Android.

To take advantage of it, please install it on the PC.

7.1. Windows

http://sourceforge.net/projects/espeak/files/espeak/espeak-1.48/setup_espeak-1.48.04.exe

7.1. macOS

<http://sourceforge.net/projects/espeak/files/espeak/espeak-1.45/espeak-1.45.04-OSX.zip>

7.2. Linux

```
sudo apt-get install espeak
```

7.3. eSpeak-NG

<https://github.com/espeak-ng/espeak-ng#binaries>

8. Third-party support (PlayMaker etc.)

RT-Voice supports various products from other companies. Please import the desired packages from "Assets/Plugins/crosstales/RTVoice/3rd party".

9. Verify installation

Check if RT-Voice is installed:

```
#if CT_RTV
    Debug.Log("RTV installed: " + Util.Constants.ASSET_VERSION);
#else
    Debug.LogWarning("RTV NOT installed!");
#endif
```

10. Upgrade to new version

Follow this steps to upgrade the version of "RT-Voice PRO":

1. Update "RT-Voice PRO" to the latest version from the "Unity AssetStore"
2. Inside the project in Unity, go to menu "File" => "New Scene"
3. Delete the "Assets/Plugins/crosstales/RTVoice" folder from the Project-view
4. Import the latest version downloaded from the "Unity AssetStore"

11. Important notes

11.1. Oculus Quest 2

The Oculus Quest 2 is runs technically on Android, but has no TTS engine installed:

<https://forums.oculusvr.com/developer/discussion/78403/oculus-quest-text-to-speech>

Pre-generate the speeches or use an online solution instead.

12. Problems, improvements etc.

If you encounter any problems with this asset, just [send us an email](#) with a problem description and the invoice number and we will try to solve it

13. Release notes

See "VERSIONS.txt" under "Assets/crosstales/RTVoice/Documentation" or online:

<https://crosstales.com/media/data/assets/rtvoice/VERSIONS.txt>

14. Credits

The icons are based on [Font Awesome](#).

15. Contact and further information






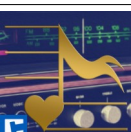

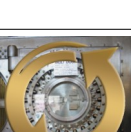

crosstales LLC

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CH-8002 Zürich

| | |
|----------------|---|
| Homepage: | https://www.crosstales.com/en/portfolio/rtvoice/ |
| Email: | rtvoice@crosstales.com |
| AssetStore: | https://assetstore.unity.com/lists/crosstales-42213 |
| Forum: | https://forum.unity.com/threads/rt-voice-run-time-text-to-speech-solution.340046/ |
| Documentation: | https://www.crosstales.com/media/data/assets/rtvoice/RTVoice-doc.pdf |
| API: | https://www.crosstales.com/en/assets/rtvoice/api/ |
| WebGL-Demo: | https://www.crosstales.com/media/data/assets/rtvoice/webgl/ |
| Windows-Demo: | https://drive.google.com/file/d/11BFDLbj9vmyrfltXeS_d9zK3oM9h8TaS/view?usp=sharing |
| Mac-Demo: | https://drive.google.com/file/d/11A7u7g7Cs63Bu7lv7ER9KFTVCU9oWAaT/view?usp=sharing |
| Linux-Demo: | https://drive.google.com/file/d/1XViADtStr8NXKHPMejXQ6iY4C2U_Bh3o/view?usp=sharing |
| Android-Demo: | https://drive.google.com/file/d/11FUbfuvSAAT5JgdolUKZO1sCPkTAFYJG/view?usp=sharing |

16. Our other assets

| | |
|---|--|
|  <p>3D Skybox</p> | <p>Those beautiful packages contain professional 8k, HDR, stereoscopic 360° real-world skyboxes for your projects.</p> |
|  <p>Bad Word Filter</p> | <p>The "Bad Word Filter" (aka profanity or obscenity filter) is exactly what the title suggests: a tool to filter swearwords and other "bad sentences".</p> |
|  <p>DJ</p> | <p>DJ is a player for external music-files. It allows a user to play his own sound inside any Unity-app. It can also read ID3-tags.</p> |
|  <p>File Browser</p> | <p>File Browser is a wrapper for native file dialogs on Windows, macOS, Linux and UWP (WSA).</p> |
|  <p>Online Check</p> | <p>You need a reliable solution to check for Internet availability? Here it is!</p> |
|  <p>Radio</p> | <p>Radio allows implementing free music from Internet radio stations into your project..</p> |
|  <p>True Random</p> | <p>True Random can generate "true random" numbers for you and your application. The randomness comes from atmospheric noise, which for many purposes is better than the pseudo-random number algorithms typically used in computer programs.</p> |
|  <p>Turbo Backup</p> | <p>Turbo Backup is the fastest and safest way to backup your Unity project. It only stores the difference between the last backup, this makes it incredible fast.</p> |
|  <p>Turbo Builder</p> | <p>Turbo Builder creates builds for multiple platforms in one click. It works together with Turbo Switch to offer an incredible fast build pipeline.</p> |



[Turbo Switch](#)

Turbo Switch is a Unity editor extension to reduce the time for assets to import during platform switches. We measured speed improvements up to 100x faster than the built-in switch in Unity.

17. Appendix

17.1. Voices

The voices of all available providers ordered by language.

Please see chapter 6 on how-to add additional voices.

17.1.1. Windows

Windows 10 (64bit, tested: 28.04.2020)

Number of voices: 24 (but can easily be extended with additional voices)

| Name | Gender | Language |
|--|--------|----------|
| Microsoft Server Speech Text to Speech Voice (ca-ES, Herenà) | FEMALE | ca-ES |
| Microsoft Server Speech Text to Speech Voice (da-DK, Helle) | FEMALE | da-DK |
| Microsoft Hedda Desktop | FEMALE | de-DE |
| Microsoft Server Speech Text to Speech Voice (en-AU, Hayley) | FEMALE | en-AU |
| Microsoft Server Speech Text to Speech Voice (en-CA, Heather) | FEMALE | en-CA |
| Microsoft Server Speech Text to Speech Voice (en-IN, Heera) | FEMALE | en-IN |
| Microsoft Server Speech Text to Speech Voice (en-US, Helen) | FEMALE | en-US |
| Microsoft Server Speech Text to Speech Voice (en-US, ZiraPro) | FEMALE | en-US |
| Microsoft Zira Desktop | FEMALE | en-US |
| Microsoft Server Speech Text to Speech Voice (es-ES, Helena) | FEMALE | es-ES |
| Microsoft Server Speech Text to Speech Voice (es-MX, Hilda) | FEMALE | es-MX |
| Microsoft Server Speech Text to Speech Voice (fi-FI, Heidi) | FEMALE | fi-FI |
| Microsoft Server Speech Text to Speech Voice (fr-CA, Harmonie) | FEMALE | fr-CA |
| Microsoft Server Speech Text to Speech Voice (fr-FR, Hortense) | FEMALE | fr-FR |
| Microsoft Server Speech Text to Speech Voice (it-IT, Lucia) | FEMALE | it-IT |
| Microsoft Server Speech Text to Speech Voice (ja-JP, Haruka) | FEMALE | ja-JP |
| Microsoft Server Speech Text to Speech Voice (ko-KR, HyeonGyeom) | FEMALE | ko-KR |

| | | |
|---|--------|-------|
| Heami) | | |
| Microsoft Server Speech Text to Speech Voice (nb-NO, Hulda) | FEMALE | nb-NO |
| Microsoft Server Speech Text to Speech Voice (nl-NL, Hanna) | FEMALE | nl-NL |
| Microsoft Server Speech Text to Speech Voice (pl-PL, Paulina) | FEMALE | pl-PL |
| Microsoft Server Speech Text to Speech Voice (pt-BR, Heloisa) | FEMALE | pt-BR |
| Microsoft Server Speech Text to Speech Voice (pt-PT, Helia) | FEMALE | pt-PT |
| Microsoft Server Speech Text to Speech Voice (ru-RU, Elena) | FEMALE | ru-RU |
| Microsoft Server Speech Text to Speech Voice (sv-SE, Hedvig) | FEMALE | sv-SE |

17.1.2. macOS

Version 10.15.3 (tested: 28.04.2020)

Number of voices: 46

| Name | Gender | Language |
|-------------|---------------|-----------------|
| Maged | MALE | ar-SA |
| Zuzana | FEMALE | cs-CZ |
| Sara | FEMALE | da-DK |
| Anna | FEMALE | de-DE |
| Melina | FEMALE | el-GR |
| Karen | FEMALE | en-AU |
| Daniel | MALE | en-GB |
| Moirā | FEMALE | en-IE |
| Rishi | UNKNOWN | en-IN |
| Veena | FEMALE | en-IN |
| Fiona | FEMALE | en-scotland |
| Fred | MALE | en-US |
| Samantha | FEMALE | en-US |
| Victoria | FEMALE | en-US |
| Tessa | FEMALE | en-ZA |
| Diego | MALE | es-AR |
| Jorge | MALE | es-ES |
| Monica | FEMALE | es-ES |
| Juan | MALE | es-MX |
| Paulina | FEMALE | es-MX |
| Satu | FEMALE | fi-FI |
| Amelie | FEMALE | fr-CA |
| Thomas | MALE | fr-FR |
| Carmit | FEMALE | he-IL |
| Lekha | FEMALE | hi-IN |
| Mariska | FEMALE | hu-HU |
| Damayanti | FEMALE | id-ID |
| Luca | MALE | it-IT |
| Kyoko | FEMALE | ja-JP |
| Yuna | FEMALE | ko-KR |
| Nora | FEMALE | nb-NO |
| Ellen | FEMALE | nl-BE |
| Xander | MALE | nl-NL |
| Zosia | FEMALE | pl-PL |
| Luciana | FEMALE | pt-BR |
| Joana | FEMALE | pt-PT |
| Ioana | FEMALE | ro-RO |
| Milena | FEMALE | ru-RU |
| Yuri | MALE | ru-RU |
| Laura | FEMALE | sk-SK |

| | | |
|-----------|--------|-------|
| Alva | FEMALE | sv-SE |
| Kanya | FEMALE | th-TH |
| Yelda | FEMALE | tr-TR |
| Ting-Ting | FEMALE | zh-CN |
| Sin-ji | FEMALE | zh-HK |
| Mei-Jia | FEMALE | zh-TW |

17.1.3.Android

Version 11 (Google TTS, tested: 27.08.2021)

Number of voices: 227

| Name | Gender | Language |
|--------------------|---------------|-----------------|
| ar-language | FEMALE | ar |
| ar-xa-x-arc-local | FEMALE | ar |
| ar-xa-x-ard-local | MALE | ar |
| ar-xa-x-are-local | MALE | ar |
| ar-xa-x-arz-local | FEMALE | ar |
| bn-BD-language | MALE | bn-BD |
| bn-bd-x-ban-local | MALE | bn-BD |
| bn-IN-language | FEMALE | bn-IN |
| bn-in-x-bin-local | MALE | bn-IN |
| bn-in-x-bnf-local | FEMALE | bn-IN |
| bn-in-x-bnm-local | MALE | bn-IN |
| bn-in-x-bnx-local | FEMALE | bn-IN |
| bs | FEMALE | bs |
| ca | FEMALE | ca |
| cmn-cn-x-ccc-local | FEMALE | zh-CN |
| cmn-cn-x-ccd-local | MALE | zh-CN |
| cmn-cn-x-cce-local | MALE | zh-CN |
| cmn-cn-x-ssa-local | FEMALE | zh-CN |
| cmn-tw-x-ctc-local | FEMALE | zh-TW |
| cmn-tw-x-ctd-local | MALE | zh-TW |
| cmn-tw-x-cte-local | MALE | zh-TW |
| cs-CZ-language | FEMALE | cs-CZ |
| cs-cz-x-jfs-local | FEMALE | cs-CZ |
| cy | FEMALE | cy |
| da-DK-language | FEMALE | da-DK |
| da-dk-x-kfm-local | FEMALE | da-DK |
| da-dk-x-nmm-local | MALE | da-DK |
| da-dk-x-sfp-local | FEMALE | da-DK |
| da-dk-x-vfb-local | FEMALE | da-DK |
| de-DE-language | FEMALE | de-DE |
| de-de-x-deb-local | MALE | de-DE |
| de-de-x-deg-local | MALE | de-DE |
| de-de-x-nfh-local | FEMALE | de-DE |
| el-GR-language | FEMALE | el-GR |
| el-gr-x-vfz-local | FEMALE | el-GR |
| en-AU-language | FEMALE | en-AU |
| en-au-x-afh-local | FEMALE | en-AU |
| en-au-x-aua-local | FEMALE | en-AU |
| en-au-x-aub-local | MALE | en-AU |
| en-au-x-auc-local | FEMALE | en-AU |

| | | |
|--------------------|--------|--------|
| en-au-x-aud-local | MALE | en-AU |
| en-GB-language | FEMALE | en-GB |
| en-gb-x-fis-local | FEMALE | en-GB |
| en-gb-x-gba-local | FEMALE | en-GB |
| en-gb-x-gbb-local | MALE | en-GB |
| en-gb-x-gbc-local | FEMALE | en-GB |
| en-gb-x-gbd-local | MALE | en-GB |
| en-gb-x-gbg-local | FEMALE | en-GB |
| en-gb-x-rjs-local | MALE | en-GB |
| en-IN-language | FEMALE | en-IN |
| en-in-x-ahp-local | FEMALE | en-IN |
| en-in-x-cxx-local | FEMALE | en-IN |
| en-in-x-ena-local | FEMALE | en-IN |
| en-in-x-enc-local | FEMALE | en-IN |
| en-in-x-end-local | MALE | en-IN |
| en-in-x-ene-local | MALE | en-IN |
| en-NG-language | FEMALE | en-NG |
| en-ng-x-tfn-local | FEMALE | en-NG |
| en-US-language | FEMALE | en-US |
| en-us-x-iob-local | FEMALE | en-US |
| en-us-x-iog-local | FEMALE | en-US |
| en-us-x-iol-local | MALE | en-US |
| en-us-x-iom-local | MALE | en-US |
| en-us-x-sfg-local | FEMALE | en-US |
| en-us-x-tpc-local | FEMALE | en-US |
| en-us-x-tpd-local | MALE | en-US |
| en-us-x-tpf-local | FEMALE | en-US |
| es-ES-language | FEMALE | es-ES |
| es-es-x-eea-local | FEMALE | es-ES |
| es-es-x-eec-local | FEMALE | es-ES |
| es-es-x-eed-local | MALE | es-ES |
| es-es-x-eee-local | FEMALE | es-ES |
| es-es-x-eef-local | MALE | es-ES |
| es-US-language | FEMALE | es-US |
| es-us-x-esc-local | FEMALE | es-US |
| es-us-x-esd-local | MALE | es-US |
| es-us-x-esf-local | MALE | es-US |
| et-EE-language | MALE | et-EE |
| et-ee-x-tms-local | MALE | et-EE |
| fi-FI-language | FEMALE | fi-FI |
| fi-fi-x-afi-local | FEMALE | fi-FI |
| fil-PH-language | FEMALE | fil-PH |
| fil-ph-x-cfc-local | FEMALE | fil-PH |
| fil-ph-x-fic-local | FEMALE | fil-PH |
| fil-ph-x-fid-local | MALE | fil-PH |
| fil-ph-x-fie-local | MALE | fil-PH |
| fr-CA-language | FEMALE | fr-CA |

| | | |
|-------------------|--------|-------|
| fr-ca-x-caa-local | FEMALE | fr-CA |
| fr-ca-x-cab-local | MALE | fr-CA |
| fr-ca-x-cac-local | FEMALE | fr-CA |
| fr-ca-x-cad-local | MALE | fr-CA |
| fr-FR-language | FEMALE | fr-FR |
| fr-fr-x-frā-local | FEMALE | fr-FR |
| fr-fr-x-frb-local | MALE | fr-FR |
| fr-fr-x-frc-local | FEMALE | fr-FR |
| fr-fr-x-frd-local | MALE | fr-FR |
| fr-fr-x-vlf-local | FEMALE | fr-FR |
| gu-IN-language | FEMALE | gu-IN |
| gu-in-x-guf-local | FEMALE | gu-IN |
| gu-in-x-gum-local | MALE | gu-IN |
| hi-IN-language | FEMALE | hi-IN |
| hi-in-x-cfn-local | FEMALE | hi-IN |
| hi-in-x-hia-local | FEMALE | hi-IN |
| hi-in-x-hic-local | FEMALE | hi-IN |
| hi-in-x-hid-local | MALE | hi-IN |
| hi-in-x-hie-local | MALE | hi-IN |
| hr | FEMALE | hr |
| hu-HU-language | FEMALE | hu-HU |
| hu-hu-x-kfl-local | FEMALE | hu-HU |
| id-ID-language | FEMALE | in-ID |
| id-id-x-dfz-local | FEMALE | in-ID |
| id-id-x-idc-local | FEMALE | in-ID |
| id-id-x-idd-local | MALE | in-ID |
| id-id-x-ide-local | MALE | in-ID |
| it-IT-language | FEMALE | it-IT |
| it-it-x-itb-local | FEMALE | it-IT |
| it-it-x-itc-local | MALE | it-IT |
| it-it-x-itd-local | MALE | it-IT |
| it-it-x-kda-local | FEMALE | it-IT |
| jā-JP-language | FEMALE | jā-JP |
| jā-jp-x-htm-local | FEMALE | jā-JP |
| jā-jp-x-jāb-local | FEMALE | jā-JP |
| jā-jp-x-jāc-local | MALE | jā-JP |
| jā-jp-x-jād-local | MALE | jā-JP |
| jv-ID-language | FEMALE | jv-ID |
| jv-id-x-jvf-local | FEMALE | jv-ID |
| km-KH-language | FEMALE | km-KH |
| km-kh-x-khm-local | FEMALE | km-KH |
| kn-IN-language | FEMALE | kn-IN |
| kn-in-x-knf-local | FEMALE | kn-IN |
| kn-in-x-knm-local | MALE | kn-IN |
| ko-KR-language | FEMALE | ko-KR |
| ko-kr-x-ism-local | FEMALE | ko-KR |
| ko-kr-x-kob-local | FEMALE | ko-KR |

| | | |
|-------------------|--------|-------|
| ko-kr-x-koc-local | MALE | ko-KR |
| ko-kr-x-kod-local | MALE | ko-KR |
| ku | FEMALE | ku |
| la | FEMALE | la |
| ml-IN-language | FEMALE | ml-IN |
| ml-in-x-mlf-local | FEMALE | ml-IN |
| ml-in-x-mlm-local | MALE | ml-IN |
| mr-IN-language | FEMALE | mr-IN |
| mr-in-x-mrf-local | FEMALE | mr-IN |
| ms-MY-language | FEMALE | ms-MY |
| ms-my-x-msc-local | FEMALE | ms-MY |
| ms-my-x-msd-local | MALE | ms-MY |
| ms-my-x-mse-local | FEMALE | ms-MY |
| ms-my-x-msg-local | MALE | ms-MY |
| nb-NO-language | FEMALE | nb-NO |
| nb-no-x-cfl-local | FEMALE | nb-NO |
| nb-no-x-cmj-local | MALE | nb-NO |
| nb-no-x-rfj-local | FEMALE | nb-NO |
| nb-no-x-tfs-local | FEMALE | nb-NO |
| nb-no-x-tmg-local | MALE | nb-NO |
| ne-NP-language | FEMALE | ne-NP |
| ne-np-x-nep-local | FEMALE | ne-NP |
| nl-NL-language | FEMALE | nl-NL |
| nl-nl-x-bmh-local | MALE | nl-NL |
| nl-nl-x-dma-local | MALE | nl-NL |
| nl-nl-x-lfc-local | FEMALE | nl-NL |
| nl-nl-x-tfb-local | FEMALE | nl-NL |
| nl-nl-x-yfr-local | FEMALE | nl-NL |
| pl-PL-language | FEMALE | pl-PL |
| pl-pl-x-afb-local | FEMALE | pl-PL |
| pl-pl-x-bmg-local | MALE | pl-PL |
| pl-pl-x-jmk-local | MALE | pl-PL |
| pl-pl-x-oda-local | FEMALE | pl-PL |
| pl-pl-x-zfg-local | FEMALE | pl-PL |
| pt-BR-language | FEMALE | pt-BR |
| pt-br-x-afs-local | FEMALE | pt-BR |
| pt-PT-language | FEMALE | pt-PT |
| pt-pt-x-jfb-local | FEMALE | pt-PT |
| pt-pt-x-jmn-local | MALE | pt-PT |
| pt-pt-x-pmj-local | MALE | pt-PT |
| pt-pt-x-sfs-local | FEMALE | pt-PT |
| ro-RO-language | FEMALE | ro-RO |
| ro-ro-x-vfv-local | FEMALE | ro-RO |
| ru-RU-language | FEMALE | ru-RU |
| ru-ru-x-dfc-local | FEMALE | ru-RU |
| ru-ru-x-ruc-local | FEMALE | ru-RU |
| ru-ru-x-rud-local | MALE | ru-RU |

| | | |
|--------------------|--------|--------|
| ru-ru-x-rue-local | FEMALE | ru-RU |
| ru-ru-x-ruf-local | MALE | ru-RU |
| si-LK-language | FEMALE | si-LK |
| si-lk-x-sin-local | FEMALE | si-LK |
| sk-SK-language | FEMALE | sk-SK |
| sk-sk-x-sfk-local | FEMALE | sk-SK |
| sq | FEMALE | sq |
| sr | FEMALE | sr |
| su-ID-language | FEMALE | su-ID |
| su-id-x-suf-local | FEMALE | su-ID |
| sv-SE-language | FEMALE | sv-SE |
| sv-se-x-lfs-local | FEMALE | sv-SE |
| sw | FEMALE | sw |
| ta-IN-language | FEMALE | ta-IN |
| ta-in-x-taf-local | FEMALE | ta-IN |
| ta-in-x-tag-local | MALE | ta-IN |
| te-IN-language | FEMALE | te-IN |
| te-in-x-tef-local | FEMALE | te-IN |
| te-in-x-tem-local | MALE | te-IN |
| th-TH-language | FEMALE | th-TH |
| th-th-x-mol-local | FEMALE | th-TH |
| tr-TR-language | FEMALE | tr-TR |
| tr-tr-x-amā-local | MALE | tr-TR |
| tr-tr-x-cfs-local | FEMALE | tr-TR |
| tr-tr-x-efu-local | FEMALE | tr-TR |
| tr-tr-x-mfm-local | FEMALE | tr-TR |
| tr-tr-x-tmc-local | MALE | tr-TR |
| uk-UA-language | FEMALE | uk-UA |
| uk-ua-x-hfd-local | FEMALE | uk-UA |
| ur-PK-language | FEMALE | ur-PK |
| ur-pk-x-cfn-local | FEMALE | ur-PK |
| ur-pk-x-urm-local | MALE | ur-PK |
| vi-VN-language | FEMALE | vi-VN |
| vi-vn-x-gft-local | FEMALE | vi-VN |
| vi-vn-x-vic-local | FEMALE | vi-VN |
| vi-vn-x-vid-local | MALE | vi-VN |
| vi-vn-x-vie-local | FEMALE | vi-VN |
| vi-vn-x-vif-local | MALE | vi-VN |
| yue-HK-language | FEMALE | yue-HK |
| yue-hk-x-jar-local | FEMALE | yue-HK |
| yue-hk-x-yuc-local | FEMALE | yue-HK |
| yue-hk-x-yud-local | MALE | yue-HK |
| yue-hk-x-yue-local | FEMALE | yue-HK |
| yue-hk-x-yuf-local | MALE | yue-HK |
| zh-CN-language | FEMALE | zh-CN |
| zh-TW-language | FEMALE | zh-TW |

17.1.4.iOS

Version 13.3.1 (tested: 28.04.2020)

Number of voices: 52

| Name | Gender | Language |
|-------------|---------------|-----------------|
| Maged | MALE | ar-SA |
| Zuzana | FEMALE | cs-CZ |
| Sara | FEMALE | da-DK |
| Anna | FEMALE | de-DE |
| Helena | FEMALE | de-DE |
| Martin | MALE | de-DE |
| Melina | FEMALE | el-GR |
| Catherine | FEMALE | en-AU |
| Gordon | MALE | en-AU |
| Karen | FEMALE | en-AU |
| Arthur | MALE | en-GB |
| Daniel | MALE | en-GB |
| Martha | FEMALE | en-GB |
| Moirá | FEMALE | en-IE |
| Rishi | UNKNOWN | en-IN |
| Fred | MALE | en-US |
| Nicky | FEMALE | en-US |
| Samantha | FEMALE | en-US |
| Tessa | FEMALE | en-ZA |
| Mónica | FEMALE | es-ES |
| Paulina | FEMALE | es-MX |
| Satu | FEMALE | fi-FI |
| Amélie | FEMALE | fr-CA |
| Daniel | MALE | fr-FR |
| Marie | FEMALE | fr-FR |
| Thomas | MALE | fr-FR |
| Carmit | FEMALE | he-IL |
| Lekha | FEMALE | hi-IN |
| Mariska | FEMALE | hu-HU |
| Damayanti | FEMALE | id-ID |
| Alice | FEMALE | it-IT |
| Hattori | MALE | ja-JP |
| Kyoko | FEMALE | ja-JP |
| O-ren | FEMALE | ja-JP |
| Yuna | FEMALE | ko-KR |
| Ellen | FEMALE | nl-BE |
| Xander | MALE | nl-NL |
| Nora | FEMALE | no-NO |
| Zosia | FEMALE | pl-PL |
| Luciana | FEMALE | pt-BR |

| | | |
|-----------|---------|-------|
| Joana | FEMALE | pt-PT |
| Ioana | FEMALE | ro-RO |
| Milena | FEMALE | ru-RU |
| Laura | FEMALE | sk-SK |
| Alva | FEMALE | sv-SE |
| Kanya | FEMALE | th-TH |
| Yelda | FEMALE | tr-TR |
| Li-mu | FEMALE | zh-CN |
| Tian-Tian | UNKNOWN | zh-CN |
| Yu-shu | FEMALE | zh-CN |
| Sin-Ji | FEMALE | zh-HK |
| Mei-Jia | FEMALE | zh-TW |

17.1.5.WSA (UWP) / XBox

Depends on the installed voices.

17.1.6. MaryTTS

Version 5.2 (tested: 27.08.2021)

Number of voices: 32

| Name | Gender | Language |
|---------------------------|---------------|-----------------|
| bits1 | FEMALE | de |
| bits1-hsmm | FEMALE | de |
| bits2 | MALE | de |
| bits3 | MALE | de |
| bits3-hsmm | MALE | de |
| bits4 | FEMALE | de |
| dfki-pavoque-neutral | MALE | de |
| dfki-pavoque-neutral-hsmm | MALE | de |
| dfki-obadiah | MALE | en-GB |
| dfki-obadiah-hsmm | MALE | en-GB |
| dfki-poppy | FEMALE | en-GB |
| dfki-poppy-hsmm | FEMALE | en-GB |
| dfki-prudence | FEMALE | en-GB |
| dfki-prudence-hsmm | FEMALE | en-GB |
| dfki-spike | MALE | en-GB |
| dfki-spike-hsmm | MALE | en-GB |
| cmu-bdl | MALE | en-US |
| cmu-bdl-hsmm | MALE | en-US |
| cmu-rms | MALE | en-US |
| cmu-rms-hsmm | MALE | en-US |
| cmu-slt | FEMALE | en-US |
| cmu-slt-hsmm | FEMALE | en-US |
| enst-camille | FEMALE | fr |
| enst-camille-hsmm | FEMALE | fr |
| enst-dennys-hsmm | MALE | fr |
| upmc-jessica | FEMALE | fr |
| upmc-jessica-hsmm | FEMALE | fr |
| upmc-pierre | MALE | fr |
| upmc-pierre-hsmm | MALE | fr |
| istc-lucia-hsmm | FEMALE | it |
| dfki-ot | MALE | tr |
| dfki-ot-hsmm | MALE | tr |

17.1.7. eSpeak

Version 1.48.03 (tested: 27.08.2021)

Number of voices: 83

| Name | Gender | Language |
|----------------------|---------------|-----------------|
| amharic-test | UNKNOWN | am |
| aragonese | MALE | an |
| assamese-test | UNKNOWN | as |
| azerbaijani-test | UNKNOWN | az |
| bulgarian | UNKNOWN | bg |
| bengali-test | MALE | bn |
| bosnian | MALE | bs |
| catalan | MALE | ca |
| czech | MALE | cs |
| welsh | MALE | cy |
| danish | MALE | da |
| german | MALE | de |
| greek | MALE | el |
| default | MALE | en |
| english | MALE | en-gb |
| en-scottish | MALE | en-sc |
| english-north | MALE | en-uk-north |
| english_rp | MALE | en-uk-rp |
| english_wmids | MALE | en-uk-wmids |
| english-us | MALE | en-us |
| en-westindies | MALE | en-wi |
| esperanto | MALE | eo |
| spanish | MALE | es |
| spanish-latin-am | MALE | es-la |
| estonian | UNKNOWN | et |
| basque-test | UNKNOWN | eu |
| persian | UNKNOWN | fa |
| persian-pinglish | UNKNOWN | fa-pin |
| finnish | MALE | fi |
| french-Belgium | MALE | fr-be |
| french | MALE | fr-fr |
| irish-gaelge | UNKNOWN | ga |
| scottish-gaelic-test | UNKNOWN | gd |
| greek-ancient | MALE | grc |
| gujarati-test | UNKNOWN | gu |
| hindi | MALE | hi |
| croatian | MALE | hr |
| hungarian | MALE | hu |
| armenian | MALE | hy |
| armenian-west | MALE | hy-west |

| | | |
|--------------------|---------|--------|
| indonesian | MALE | id |
| icelandic | MALE | is |
| italian | MALE | it |
| lojban | UNKNOWN | jbo |
| georgian | UNKNOWN | ka |
| greenlandic | UNKNOWN | kl |
| kannada | UNKNOWN | kn |
| korean-test | MALE | ko |
| kurdish | MALE | ku |
| latin | MALE | la |
| lingua_franca_nova | MALE | lfn |
| lithuanian | MALE | lt |
| latvian | MALE | lv |
| macedonian | MALE | mk |
| malayalam | MALE | ml |
| malay | MALE | ms |
| nahuatl-classical | MALE | nci |
| nepali | MALE | ne |
| dutch | MALE | nl |
| norwegian | MALE | no |
| oriya-test | UNKNOWN | or |
| punjabi | UNKNOWN | pa |
| papiamentto-test | UNKNOWN | pap |
| polish | MALE | pl |
| brazil | MALE | pt-br |
| portugal | MALE | pt-pt |
| romanian | MALE | ro |
| russian | MALE | ru |
| sinhala-test | UNKNOWN | si |
| slovak | MALE | sk |
| slovenian-test | UNKNOWN | sl |
| serbian | MALE | sr |
| swedish | MALE | sv |
| swahili-test | MALE | sw |
| tamil | MALE | ta |
| telugu-test | UNKNOWN | te |
| turkish | MALE | tr |
| urdu-test | UNKNOWN | ur |
| vietnam | MALE | vi |
| vietnam_hue | MALE | vi-hue |
| vietnam_sgn | MALE | vi-sgn |
| Mandarin | MALE | zh |
| cantonese | MALE | zh-yue |

17.1.8. AWS Polly

Tested: 27.08.2021

Number of voices: 63

| Name | Gender | Language |
|-------------|---------------|-----------------|
| Zeina | FEMALE | ar |
| Gwyneth | FEMALE | cy-GB |
| Mads | MALE | da-DK |
| Naja | FEMALE | da-DK |
| Hans | MALE | de-DE |
| Marlene | FEMALE | de-DE |
| Vicki | FEMALE | de-DE |
| Nicole | FEMALE | en-AU |
| Olivia* | FEMALE | en-AU |
| Russell | MALE | en-AU |
| Amy | FEMALE | en-GB |
| Brian | MALE | en-GB |
| Emma | FEMALE | en-GB |
| Geraint | MALE | En-GB-WLS |
| Aditi | FEMALE | en-IN |
| Raveena | FEMALE | en-IN |
| Ivy | FEMALE | en-US |
| Joanna | FEMALE | en-US |
| Joey | MALE | en-US |
| Justin | MALE | en-US |
| Kendra | FEMALE | en-US |
| Kevin* | MALE | en-US |
| Kimberly | FEMALE | en-US |
| Matthew | MALE | en-US |
| Salli | FEMALE | en-US |
| Conchita | FEMALE | es-ES |
| Enrique | MALE | es-ES |
| Lucia | FEMALE | es-ES |
| Mia | FEMALE | es-MX |
| Lupe | FEMALE | es-US |
| Miguel | MALE | es-US |
| Penelope | FEMALE | es-US |
| Chantal | FEMALE | fr-CA |
| Gabrielle* | FEMALE | fr-CA |
| Celine | FEMALE | fr-FR |
| Lea | FEMALE | fr-FR |
| Mathieu | MALE | fr-FR |
| Dora | FEMALE | is-IS |
| Karl | MALE | is-IS |
| Bianca | FEMALE | it-IT |

| | | |
|-----------|--------|-------|
| Carla | FEMALE | it-IT |
| Giorgio | MALE | it-IT |
| Mizuki | FEMALE | ja-JP |
| Takumi | MALE | ja-JP |
| Seoyeon | FEMALE | ko-KR |
| Lotte | FEMALE | nl-NL |
| Ruben | MALE | nl-NL |
| Liv | FEMALE | no-NO |
| Ewa | FEMALE | pl-PL |
| Jacek | MALE | pl-PL |
| Jan | MALE | pl-PL |
| Maja | FEMALE | pl-PL |
| Camila | FEMALE | pt-BR |
| Ricardo | MALE | pt-BR |
| Vitoria | FEMALE | pt-BR |
| Cristiano | MALE | pt-PT |
| Ines | FEMALE | pt-PT |
| Carmen | FEMALE | ro-RO |
| Maxim | MALE | ru-RU |
| Tatyana | FEMALE | ru-RU |
| Astrid | FEMALE | sv-SE |
| Filiz | FEMALE | tr-TR |
| Zhiyu | FEMALE | zh |

* = only available as neural voice

17.1.9. Klattersynth

Unlimited variations of voices can be created.

17.1.10. SAPI Unity

Has the same voices as in chapter 17.1.1.

17.1.11. WebGL Speech Synthesis

Google Chrome 81.0.4044.122 (tested: 28.04.2020)

Number of voices: 17

| Name | Gender | Language |
|----------------------------------|---------|----------|
| Google UK English Female | FEMALE | en-GB |
| Google UK English Male | MALE | en-GB |
| Google US English | UNKNOWN | en-US |
| Google español | UNKNOWN | es-ES |
| Google español de Estados Unidos | UNKNOWN | es-US |
| Google français | UNKNOWN | fr-FR |
| Google हिन्दी | UNKNOWN | hi-IN |
| Google italiano | UNKNOWN | it-IT |
| Google 日本語 | UNKNOWN | ja-JP |
| Google 한국의 | UNKNOWN | ko-KR |
| Google Nederlands | UNKNOWN | nl-NL |
| Google polski | UNKNOWN | pl-PL |
| Google português do Brasil | UNKNOWN | pt-BR |
| Google русский | UNKNOWN | ru-RU |
| Google 普通话 (中国大陆) | UNKNOWN | zh-CN |
| Google 粵語 (香港) | UNKNOWN | zh-HK |
| Google 國語 (臺灣) | UNKNOWN | zh-TW |

17.1.12. Azure

Tested: 17.09.2021

Number of voices: 260

| Name | Gender | Language |
|----------------|---------------|-----------------|
| Hoda | FEMALE | ar-EG |
| SalmaNeural | FEMALE | ar-EG |
| ShakirNeural | MALE | ar-EG |
| HamedNeural | MALE | ar-SA |
| Naayf | MALE | ar-SA |
| ZariyahNeural | FEMALE | ar-SA |
| BorislavNeural | MALE | bg-BG |
| Ivan | MALE | bg-BG |
| KalinaNeural | FEMALE | bg-BG |
| AlbaNeural | FEMALE | ca-ES |
| EnricNeural | MALE | ca-ES |
| HerenaRUS | FEMALE | ca-ES |
| JoanaNeural | FEMALE | ca-ES |
| AntoninNeural | MALE | cs-CZ |
| Jakub | MALE | cs-CZ |
| VlastaNeural | FEMALE | cs-CZ |
| AledNeural | MALE | cy-GB |
| NiaNeural | FEMALE | cy-GB |
| ChristelNeural | FEMALE | da-DK |
| HelleRUS | FEMALE | da-DK |
| JeppeNeural | MALE | da-DK |
| IngridNeural | FEMALE | de-AT |
| JonasNeural | MALE | de-AT |
| Michael | MALE | de-AT |
| JanNeural | MALE | de-CH |
| Karsten | MALE | de-CH |
| LeniNeural | FEMALE | de-CH |
| ConradNeural | MALE | de-DE |
| Hedda | FEMALE | de-DE |
| HeddaRUS | FEMALE | de-DE |
| KatjaNeural | FEMALE | de-DE |
| Stefan-Apollo | MALE | de-DE |
| AthinaNeural | FEMALE | el-GR |
| NestorasNeural | MALE | el-GR |
| Stefanos | MALE | el-GR |
| Catherine | FEMALE | en-AU |
| HayleyRUS | FEMALE | en-AU |
| NatashaNeural | FEMALE | en-AU |
| WilliamNeural | MALE | en-AU |
| ClaraNeural | FEMALE | en-CA |

| | | |
|-------------------------|--------|-------|
| HeatherRUS | FEMALE | en-CA |
| LiamNeural | MALE | en-CA |
| Linda | FEMALE | en-CA |
| George-Apollo | MALE | en-GB |
| HazelRUS | FEMALE | en-GB |
| LibbyNeural | FEMALE | en-GB |
| RyanNeural | MALE | en-GB |
| SoniaNeural | FEMALE | en-GB |
| Susan-Apollo | FEMALE | en-GB |
| SamNeural | MALE | en-HK |
| YanNeural | FEMALE | en-HK |
| ConnorNeural | MALE | en-IE |
| EmilyNeural | FEMALE | en-IE |
| Sean | MALE | en-IE |
| Heera-Apollo | FEMALE | en-IN |
| NeerjaNeural | FEMALE | en-IN |
| PrabhatNeural | MALE | en-IN |
| PriyaRUS | FEMALE | en-IN |
| Ravi-Apollo | MALE | en-IN |
| MitchellNeural | MALE | en-NZ |
| MollyNeural | FEMALE | en-NZ |
| JamesNeural | MALE | en-PH |
| RosaNeural | FEMALE | en-PH |
| LunaNeural | FEMALE | en-SG |
| WayneNeural | MALE | en-SG |
| AmberNeural | FEMALE | en-US |
| AnaNeural | FEMALE | en-US |
| AriaNeural | FEMALE | en-US |
| AshleyNeural | FEMALE | en-US |
| BenjaminRUS | MALE | en-US |
| BrandonNeural | MALE | en-US |
| ChristopherNeural | MALE | en-US |
| CoraNeural | FEMALE | en-US |
| ElizabethNeural | FEMALE | en-US |
| EricNeural | MALE | en-US |
| Guy24kRUS | MALE | en-US |
| GuyNeural | MALE | en-US |
| JacobNeural | MALE | en-US |
| JennyMultilingualNeural | FEMALE | en-US |
| JennyNeural | FEMALE | en-US |
| Jessa24kRUS | FEMALE | en-US |
| JessaRUS | FEMALE | en-US |
| MichelleNeural | FEMALE | en-US |
| MonicaNeural | FEMALE | en-US |
| SaraNeural | FEMALE | en-US |
| ZiraRUS | FEMALE | en-US |
| LeahNeural | FEMALE | en-ZA |

| | | |
|-----------------|--------|-------|
| LukeNeural | MALE | en-ZA |
| ElenaNeural | FEMALE | es-AR |
| TomasNeural | MALE | es-AR |
| GonzaloNeural | MALE | es-CO |
| SalomeNeural | FEMALE | es-CO |
| AlvaroNeural | MALE | es-ES |
| ElviraNeural | FEMALE | es-ES |
| HelenaRUS | FEMALE | es-ES |
| Laura-Apollo | FEMALE | es-ES |
| Pablo-Apollo | MALE | es-ES |
| DaliaNeural | FEMALE | es-MX |
| HildaRUS | FEMALE | es-MX |
| JorgeNeural | MALE | es-MX |
| Raul-Apollo | MALE | es-MX |
| AlonsoNeural | MALE | es-US |
| PalomaNeural | FEMALE | es-US |
| AnuNeural | FEMALE | et-EE |
| KertNeural | MALE | et-EE |
| HarriNeural | MALE | fi-FI |
| HeidiRUS | FEMALE | fi-FI |
| NooraNeural | FEMALE | fi-FI |
| SelmaNeural | FEMALE | fi-FI |
| CharlineNeural | FEMALE | fr-BE |
| GerardNeural | MALE | fr-BE |
| AntoineNeural | MALE | fr-CA |
| Caroline | FEMALE | fr-CA |
| HarmonieRUS | FEMALE | fr-CA |
| JeanNeural | MALE | fr-CA |
| SylvieNeural | FEMALE | fr-CA |
| ArianeNeural | FEMALE | fr-CH |
| FabriceNeural | MALE | fr-CH |
| Guillaume | MALE | fr-CH |
| DeniseNeural | FEMALE | fr-FR |
| HenriNeural | MALE | fr-FR |
| HortenseRUS | FEMALE | fr-FR |
| Julie-Apollo | FEMALE | fr-FR |
| Paul-Apollo | MALE | fr-FR |
| ColmNeural | MALE | ga-IE |
| OrlaNeural | FEMALE | ga-IE |
| DhwaniNeural | FEMALE | gu-IN |
| NiranjanaNeural | MALE | gu-IN |
| Asaf | MALE | he-IL |
| AvriNeural | MALE | he-IL |
| HilaNeural | FEMALE | he-IL |
| Hemant | MALE | hi-IN |
| Kalpana | FEMALE | hi-IN |
| Kalpana-Apollo | FEMALE | hi-IN |

| | | |
|-----------------|--------|-------|
| MadhurNeural | MALE | hi-IN |
| SwaraNeural | FEMALE | hi-IN |
| GabrijelaNeural | FEMALE | hr-HR |
| Matej | MALE | hr-HR |
| SreckoNeural | MALE | hr-HR |
| NoemiNeural | FEMALE | hu-HU |
| Szabolcs | MALE | hu-HU |
| TamasNeural | MALE | hu-HU |
| Andika | MALE | id-ID |
| ArdiNeural | MALE | id-ID |
| GadisNeural | FEMALE | id-ID |
| Cosimo-Apollo | MALE | it-IT |
| DiegoNeural | MALE | it-IT |
| ElsaNeural | FEMALE | it-IT |
| IsabellaNeural | FEMALE | it-IT |
| LuciaRUS | FEMALE | it-IT |
| Ayumi-Apollo | FEMALE | ja-JP |
| HarukaRUS | FEMALE | ja-JP |
| Ichiro-Apollo | MALE | ja-JP |
| KeitaNeural | MALE | ja-JP |
| NanamiNeural | FEMALE | ja-JP |
| HeamiRUS | FEMALE | ko-KR |
| InJoonNeural | MALE | ko-KR |
| SunHiNeural | FEMALE | ko-KR |
| LeonasNeural | MALE | lt-LT |
| OnaNeural | FEMALE | lt-LT |
| EveritaNeural | FEMALE | lv-LV |
| NilsNeural | MALE | lv-LV |
| AarohiNeural | FEMALE | mr-IN |
| ManoharNeural | MALE | mr-IN |
| OsmanNeural | MALE | ms-MY |
| Rizwan | MALE | ms-MY |
| YasminNeural | FEMALE | ms-MY |
| GraceNeural | FEMALE | mt-MT |
| JosephNeural | MALE | mt-MT |
| FinnNeural | MALE | nb-NO |
| HuldaRUS | FEMALE | nb-NO |
| IselinNeural | FEMALE | nb-NO |
| PernilleNeural | FEMALE | nb-NO |
| ArnaudNeural | MALE | nl-BE |
| DenaNeural | FEMALE | nl-BE |
| ColetteNeural | FEMALE | nl-NL |
| FennaNeural | FEMALE | nl-NL |
| HannaRUS | FEMALE | nl-NL |
| MaartenNeural | MALE | nl-NL |
| AgnieszkaNeural | FEMALE | pl-PL |
| MarekNeural | MALE | pl-PL |

| | | |
|-----------------|--------|-------|
| PaulinaRUS | FEMALE | pl-PL |
| ZofiaNeural | FEMALE | pl-PL |
| AntonioNeural | MALE | pt-BR |
| Daniel-Apollo | MALE | pt-BR |
| FranciscaNeural | FEMALE | pt-BR |
| HeloisaRUS | FEMALE | pt-BR |
| DuarteNeural | MALE | pt-PT |
| FernandaNeural | FEMALE | pt-PT |
| HeliaRUS | FEMALE | pt-PT |
| RaquelNeural | FEMALE | pt-PT |
| AlinaNeural | FEMALE | ro-RO |
| Andrei | MALE | ro-RO |
| EmilNeural | MALE | ro-RO |
| DariyaNeural | FEMALE | ru-RU |
| DmitryNeural | MALE | ru-RU |
| EkaterinaRUS | FEMALE | ru-RU |
| Irina-Apollo | FEMALE | ru-RU |
| Pavel-Apollo | MALE | ru-RU |
| SvetlanaNeural | FEMALE | ru-RU |
| Filip | MALE | sk-SK |
| LukasNeural | MALE | sk-SK |
| ViktoriaNeural | FEMALE | sk-SK |
| Lado | MALE | sl-SI |
| PetraNeural | FEMALE | sl-SI |
| RokNeural | MALE | sl-SI |
| HedvigRUS | FEMALE | sv-SE |
| HilleviNeural | FEMALE | sv-SE |
| MattiasNeural | MALE | sv-SE |
| SofieNeural | FEMALE | sv-SE |
| RafikiNeural | MALE | sw-KE |
| ZuriNeural | FEMALE | sw-KE |
| PallaviNeural | FEMALE | ta-IN |
| Valluvar | MALE | ta-IN |
| ValluvarNeural | MALE | ta-IN |
| Chitra | FEMALE | te-IN |
| MohanNeural | MALE | te-IN |
| ShrutiNeural | FEMALE | te-IN |
| AcharaNeural | FEMALE | th-TH |
| NiwatNeural | MALE | th-TH |
| Pattara | MALE | th-TH |
| PremwadeeNeural | FEMALE | th-TH |
| AhmetNeural | MALE | tr-TR |
| EmelNeural | FEMALE | tr-TR |
| SedaRUS | FEMALE | tr-TR |
| OstapNeural | MALE | uk-UA |
| PolinaNeural | FEMALE | uk-UA |
| AsadNeural | MALE | ur-PK |

| | | |
|------------------|--------|-------|
| UzmaNeural | FEMALE | ur-PK |
| An | MALE | vi-VN |
| HoaiMyNeural | FEMALE | vi-VN |
| NamMinhNeural | MALE | vi-VN |
| HuihuiRUS | FEMALE | zh-CN |
| Kangkang-Apollo | MALE | zh-CN |
| XiaochenNeural | FEMALE | zh-CN |
| XiaohanNeural | FEMALE | zh-CN |
| XiaomoNeural | FEMALE | zh-CN |
| XiaoqiuNeural | FEMALE | zh-CN |
| XiaoruiNeural | FEMALE | zh-CN |
| XiaoshuangNeural | FEMALE | zh-CN |
| XiaoxiaoNeural | FEMALE | zh-CN |
| XiaoxuanNeural | FEMALE | zh-CN |
| XiaoyanNeural | FEMALE | zh-CN |
| XiaoyouNeural | FEMALE | zh-CN |
| Yaoyao-Apollo | FEMALE | zh-CN |
| YunxiNeural | MALE | zh-CN |
| YunyangNeural | MALE | zh-CN |
| YunyeNeural | MALE | zh-CN |
| Danny-Apollo | MALE | zh-HK |
| HiuGaiNeural | FEMALE | zh-HK |
| HiuMaanNeural | FEMALE | zh-HK |
| Tracy-Apollo | FEMALE | zh-HK |
| TracyRUS | FEMALE | zh-HK |
| WanLungNeural | MALE | zh-HK |
| HanHanRUS | FEMALE | zh-TW |
| HsiaoChenNeural | FEMALE | zh-TW |
| HsiaoYuNeural | FEMALE | zh-TW |
| Yating-Apollo | FEMALE | zh-TW |
| YunJheNeural | MALE | zh-TW |
| Zhiwei-Apollo | MALE | zh-TW |

17.1.13. Google Cloud Speech

Tested: 27.08.2021

Number of voices: 305

| Name | Gender | Language |
|-------------------|---------------|-----------------|
| af-ZA-Standard-A | FEMALE | af-ZA |
| ar-XA-Standard-A | FEMALE | ar-XA |
| ar-XA-Standard-B | MALE | ar-XA |
| ar-XA-Standard-C | MALE | ar-XA |
| ar-XA-Standard-D | FEMALE | ar-XA |
| ar-XA-Wavenet-A | FEMALE | ar-XA |
| ar-XA-Wavenet-B | MALE | ar-XA |
| ar-XA-Wavenet-C | MALE | ar-XA |
| ar-XA-Wavenet-D | FEMALE | ar-XA |
| bg-bg-Standard-A | FEMALE | bg-BG |
| bn-IN-Standard-A | FEMALE | bn-IN |
| bn-IN-Standard-B | MALE | bn-IN |
| bn-IN-Wavenet-A | FEMALE | bn-IN |
| bn-IN-Wavenet-B | MALE | bn-IN |
| ca-es-Standard-A | FEMALE | ca-ES |
| cmn-CN-Standard-A | FEMALE | cmn-CN |
| cmn-CN-Standard-B | MALE | cmn-CN |
| cmn-CN-Standard-C | MALE | cmn-CN |
| cmn-CN-Standard-D | FEMALE | cmn-CN |
| cmn-CN-Wavenet-A | FEMALE | cmn-CN |
| cmn-CN-Wavenet-B | MALE | cmn-CN |
| cmn-CN-Wavenet-C | MALE | cmn-CN |
| cmn-CN-Wavenet-D | FEMALE | cmn-CN |
| cmn-TW-Standard-A | FEMALE | cmn-TW |
| cmn-TW-Standard-B | MALE | cmn-TW |
| cmn-TW-Standard-C | MALE | cmn-TW |
| cmn-TW-Wavenet-A | FEMALE | cmn-TW |
| cmn-TW-Wavenet-B | MALE | cmn-TW |
| cmn-TW-Wavenet-C | MALE | cmn-TW |
| cs-CZ-Standard-A | FEMALE | cs-CZ |
| cs-CZ-Wavenet-A | FEMALE | cs-CZ |
| da-DK-Standard-A | FEMALE | da-DK |
| da-DK-Standard-C | MALE | da-DK |
| da-DK-Standard-D | FEMALE | da-DK |
| da-DK-Standard-E | FEMALE | da-DK |
| da-DK-Wavenet-A | FEMALE | da-DK |
| da-DK-Wavenet-C | MALE | da-DK |
| da-DK-Wavenet-D | FEMALE | da-DK |
| da-DK-Wavenet-E | FEMALE | da-DK |
| de-DE-Standard-A | FEMALE | de-DE |

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|------------------|--------|-------|
| de-DE-Standard-B | MALE | de-DE |
| de-DE-Standard-C | FEMALE | de-DE |
| de-DE-Standard-D | MALE | de-DE |
| de-DE-Standard-E | MALE | de-DE |
| de-DE-Standard-F | FEMALE | de-DE |
| de-DE-Wavenet-A | FEMALE | de-DE |
| de-DE-Wavenet-B | MALE | de-DE |
| de-DE-Wavenet-C | FEMALE | de-DE |
| de-DE-Wavenet-D | MALE | de-DE |
| de-DE-Wavenet-E | MALE | de-DE |
| de-DE-Wavenet-F | FEMALE | de-DE |
| el-GR-Standard-A | FEMALE | el-GR |
| el-GR-Wavenet-A | FEMALE | el-GR |
| en-AU-Standard-A | FEMALE | en-AU |
| en-AU-Standard-B | MALE | en-AU |
| en-AU-Standard-C | FEMALE | en-AU |
| en-AU-Standard-D | MALE | en-AU |
| en-AU-Wavenet-A | FEMALE | en-AU |
| en-AU-Wavenet-B | MALE | en-AU |
| en-AU-Wavenet-C | FEMALE | en-AU |
| en-AU-Wavenet-D | MALE | en-AU |
| en-GB-Standard-A | FEMALE | en-GB |
| en-GB-Standard-B | MALE | en-GB |
| en-GB-Standard-C | FEMALE | en-GB |
| en-GB-Standard-D | MALE | en-GB |
| en-GB-Standard-F | FEMALE | en-GB |
| en-GB-Wavenet-A | FEMALE | en-GB |
| en-GB-Wavenet-B | MALE | en-GB |
| en-GB-Wavenet-C | FEMALE | en-GB |
| en-GB-Wavenet-D | MALE | en-GB |
| en-GB-Wavenet-F | FEMALE | en-GB |
| en-IN-Standard-A | FEMALE | en-IN |
| en-IN-Standard-B | MALE | en-IN |
| en-IN-Standard-C | MALE | en-IN |
| en-IN-Standard-D | FEMALE | en-IN |
| en-IN-Wavenet-A | FEMALE | en-IN |
| en-IN-Wavenet-B | MALE | en-IN |
| en-IN-Wavenet-C | MALE | en-IN |
| en-IN-Wavenet-D | FEMALE | en-IN |
| en-US-Standard-A | MALE | en-US |
| en-US-Standard-B | MALE | en-US |
| en-US-Standard-C | FEMALE | en-US |
| en-US-Standard-D | MALE | en-US |
| en-US-Standard-E | FEMALE | en-US |
| en-US-Standard-F | FEMALE | en-US |
| en-US-Standard-G | FEMALE | en-US |
| en-US-Standard-H | FEMALE | en-US |

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|-------------------|--------|--------|
| en-US-Standard-I | MALE | en-US |
| en-US-Standard-J | MALE | en-US |
| en-US-Wavenet-A | MALE | en-US |
| en-US-Wavenet-B | MALE | en-US |
| en-US-Wavenet-C | FEMALE | en-US |
| en-US-Wavenet-D | MALE | en-US |
| en-US-Wavenet-E | FEMALE | en-US |
| en-US-Wavenet-F | FEMALE | en-US |
| en-US-Wavenet-G | FEMALE | en-US |
| en-US-Wavenet-H | FEMALE | en-US |
| en-US-Wavenet-I | MALE | en-US |
| en-US-Wavenet-J | MALE | en-US |
| es-ES-Standard-A | FEMALE | es-ES |
| es-ES-Standard-B | MALE | es-ES |
| es-ES-Standard-C | FEMALE | es-ES |
| es-ES-Standard-D | FEMALE | es-ES |
| es-ES-Wavenet-B | MALE | es-ES |
| es-ES-Wavenet-C | FEMALE | es-ES |
| es-ES-Wavenet-D | FEMALE | es-ES |
| es-US-Standard-A | FEMALE | es-US |
| es-US-Standard-B | MALE | es-US |
| es-US-Standard-C | MALE | es-US |
| es-US-Wavenet-A | FEMALE | es-US |
| es-US-Wavenet-B | MALE | es-US |
| es-US-Wavenet-C | MALE | es-US |
| fi-FI-Standard-A | FEMALE | fi-FI |
| fi-FI-Wavenet-A | FEMALE | fi-FI |
| fil-PH-Standard-A | FEMALE | fil-PH |
| fil-PH-Standard-B | FEMALE | fil-PH |
| fil-PH-Standard-C | MALE | fil-PH |
| fil-PH-Standard-D | MALE | fil-PH |
| fil-PH-Wavenet-A | FEMALE | fil-PH |
| fil-PH-Wavenet-B | FEMALE | fil-PH |
| fil-PH-Wavenet-C | MALE | fil-PH |
| fil-PH-Wavenet-D | MALE | fil-PH |
| fr-CA-Standard-A | FEMALE | fr-CA |
| fr-CA-Standard-B | MALE | fr-CA |
| fr-CA-Standard-C | FEMALE | fr-CA |
| fr-CA-Standard-D | MALE | fr-CA |
| fr-CA-Wavenet-A | FEMALE | fr-CA |
| fr-CA-Wavenet-B | MALE | fr-CA |
| fr-CA-Wavenet-C | FEMALE | fr-CA |
| fr-CA-Wavenet-D | MALE | fr-CA |
| fr-FR-Standard-A | FEMALE | fr-FR |
| fr-FR-Standard-B | MALE | fr-FR |
| fr-FR-Standard-C | FEMALE | fr-FR |
| fr-FR-Standard-D | MALE | fr-FR |

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| fr-FR-Standard-E | FEMALE | fr-FR |
| fr-FR-Wavenet-A | FEMALE | fr-FR |
| fr-FR-Wavenet-B | MALE | fr-FR |
| fr-FR-Wavenet-C | FEMALE | fr-FR |
| fr-FR-Wavenet-D | MALE | fr-FR |
| fr-FR-Wavenet-E | FEMALE | fr-FR |
| gu-IN-Standard-A | FEMALE | gu-IN |
| gu-IN-Standard-B | MALE | gu-IN |
| gu-IN-Wavenet-A | FEMALE | gu-IN |
| gu-IN-Wavenet-B | MALE | gu-IN |
| hi-IN-Standard-A | FEMALE | hi-IN |
| hi-IN-Standard-B | MALE | hi-IN |
| hi-IN-Standard-C | MALE | hi-IN |
| hi-IN-Standard-D | FEMALE | hi-IN |
| hi-IN-Wavenet-A | FEMALE | hi-IN |
| hi-IN-Wavenet-B | MALE | hi-IN |
| hi-IN-Wavenet-C | MALE | hi-IN |
| hi-IN-Wavenet-D | FEMALE | hi-IN |
| hu-HU-Standard-A | FEMALE | hu-HU |
| hu-HU-Wavenet-A | FEMALE | hu-HU |
| id-ID-Standard-A | FEMALE | id-ID |
| id-ID-Standard-B | MALE | id-ID |
| id-ID-Standard-C | MALE | id-ID |
| id-ID-Standard-D | FEMALE | id-ID |
| id-ID-Wavenet-A | FEMALE | id-ID |
| id-ID-Wavenet-B | MALE | id-ID |
| id-ID-Wavenet-C | MALE | id-ID |
| id-ID-Wavenet-D | FEMALE | id-ID |
| is-is-Standard-A | FEMALE | is-IS |
| it-IT-Standard-A | FEMALE | it-IT |
| it-IT-Standard-B | FEMALE | it-IT |
| it-IT-Standard-C | MALE | it-IT |
| it-IT-Standard-D | MALE | it-IT |
| it-IT-Wavenet-A | FEMALE | it-IT |
| it-IT-Wavenet-B | FEMALE | it-IT |
| it-IT-Wavenet-C | MALE | it-IT |
| it-IT-Wavenet-D | MALE | it-IT |
| jā-JP-Standard-A | FEMALE | jā-JP |
| jā-JP-Standard-B | FEMALE | jā-JP |
| jā-JP-Standard-C | MALE | jā-JP |
| jā-JP-Standard-D | MALE | jā-JP |
| jā-JP-Wavenet-A | FEMALE | jā-JP |
| jā-JP-Wavenet-B | FEMALE | jā-JP |
| jā-JP-Wavenet-C | MALE | jā-JP |
| jā-JP-Wavenet-D | MALE | jā-JP |
| kn-IN-Standard-A | FEMALE | kn-IN |
| kn-IN-Standard-B | MALE | kn-IN |

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| kn-IN-Wavenet-A | FEMALE | kn-IN |
| kn-IN-Wavenet-B | MALE | kn-IN |
| ko-KR-Standard-A | FEMALE | ko-KR |
| ko-KR-Standard-B | FEMALE | ko-KR |
| ko-KR-Standard-C | MALE | ko-KR |
| ko-KR-Standard-D | MALE | ko-KR |
| ko-KR-Wavenet-A | FEMALE | ko-KR |
| ko-KR-Wavenet-B | FEMALE | ko-KR |
| ko-KR-Wavenet-C | MALE | ko-KR |
| ko-KR-Wavenet-D | MALE | ko-KR |
| lv-lv-Standard-A | MALE | lv-LV |
| ml-IN-Standard-A | FEMALE | ml-IN |
| ml-IN-Standard-B | MALE | ml-IN |
| ml-IN-Wavenet-A | FEMALE | ml-IN |
| ml-IN-Wavenet-B | MALE | ml-IN |
| ms-MY-Standard-A | FEMALE | ms-MY |
| ms-MY-Standard-B | MALE | ms-MY |
| ms-MY-Standard-C | FEMALE | ms-MY |
| ms-MY-Standard-D | MALE | ms-MY |
| ms-MY-Wavenet-A | FEMALE | ms-MY |
| ms-MY-Wavenet-B | MALE | ms-MY |
| ms-MY-Wavenet-C | FEMALE | ms-MY |
| ms-MY-Wavenet-D | MALE | ms-MY |
| nb-NO-Standard-A | FEMALE | nb-NO |
| nb-NO-Standard-B | MALE | nb-NO |
| nb-NO-Standard-C | FEMALE | nb-NO |
| nb-NO-Standard-D | MALE | nb-NO |
| nb-no-Standard-E | FEMALE | nb-NO |
| nb-no-Standard-E | FEMALE | nb-NO |
| nb-NO-Wavenet-A | FEMALE | nb-NO |
| nb-NO-Wavenet-B | MALE | nb-NO |
| nb-NO-Wavenet-C | FEMALE | nb-NO |
| nb-NO-Wavenet-D | MALE | nb-NO |
| nb-no-Wavenet-E | FEMALE | nb-NO |
| nl-BE-Standard-A | FEMALE | nl-BE |
| nl-BE-Standard-B | MALE | nl-BE |
| nl-BE-Wavenet-A | FEMALE | nl-BE |
| nl-BE-Wavenet-B | MALE | nl-BE |
| nl-NL-Standard-A | FEMALE | nl-NL |
| nl-NL-Standard-B | MALE | nl-NL |
| nl-NL-Standard-C | MALE | nl-NL |
| nl-NL-Standard-D | FEMALE | nl-NL |
| nl-NL-Standard-E | FEMALE | nl-NL |
| nl-NL-Wavenet-A | FEMALE | nl-NL |
| nl-NL-Wavenet-B | MALE | nl-NL |
| nl-NL-Wavenet-C | MALE | nl-NL |
| nl-NL-Wavenet-D | FEMALE | nl-NL |

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|------------------|--------|-------|
| nl-NL-Wavenet-E | FEMALE | nl-NL |
| pā-IN-Standard-A | FEMALE | pā-IN |
| pā-IN-Standard-B | MALE | pā-IN |
| pā-IN-Standard-C | FEMALE | pā-IN |
| pā-IN-Standard-D | MALE | pā-IN |
| pā-IN-Wavenet-A | FEMALE | pā-IN |
| pā-IN-Wavenet-B | MALE | pā-IN |
| pā-IN-Wavenet-C | FEMALE | pā-IN |
| pā-IN-Wavenet-D | MALE | pā-IN |
| pl-PL-Standard-A | FEMALE | pl-PL |
| pl-PL-Standard-B | MALE | pl-PL |
| pl-PL-Standard-C | MALE | pl-PL |
| pl-PL-Standard-D | FEMALE | pl-PL |
| pl-PL-Standard-E | FEMALE | pl-PL |
| pl-PL-Wavenet-A | FEMALE | pl-PL |
| pl-PL-Wavenet-B | MALE | pl-PL |
| pl-PL-Wavenet-C | MALE | pl-PL |
| pl-PL-Wavenet-D | FEMALE | pl-PL |
| pl-PL-Wavenet-E | FEMALE | pl-PL |
| pt-BR-Standard-A | FEMALE | pt-BR |
| pt-BR-Wavenet-A | FEMALE | pt-BR |
| pt-PT-Standard-A | FEMALE | pt-PT |
| pt-PT-Standard-B | MALE | pt-PT |
| pt-PT-Standard-C | MALE | pt-PT |
| pt-PT-Standard-D | FEMALE | pt-PT |
| pt-PT-Wavenet-A | FEMALE | pt-PT |
| pt-PT-Wavenet-B | MALE | pt-PT |
| pt-PT-Wavenet-C | MALE | pt-PT |
| pt-PT-Wavenet-D | FEMALE | pt-PT |
| ro-RO-Standard-A | FEMALE | ro-RO |
| ro-RO-Wavenet-A | FEMALE | ro-RO |
| ru-RU-Standard-A | FEMALE | ru-RU |
| ru-RU-Standard-B | MALE | ru-RU |
| ru-RU-Standard-C | FEMALE | ru-RU |
| ru-RU-Standard-D | MALE | ru-RU |
| ru-RU-Standard-E | FEMALE | ru-RU |
| ru-RU-Wavenet-A | FEMALE | ru-RU |
| ru-RU-Wavenet-B | MALE | ru-RU |
| ru-RU-Wavenet-C | FEMALE | ru-RU |
| ru-RU-Wavenet-D | MALE | ru-RU |
| ru-RU-Wavenet-E | FEMALE | ru-RU |
| sk-SK-Standard-A | FEMALE | sk-SK |
| sk-SK-Wavenet-A | FEMALE | sk-SK |
| sr-rs-Standard-A | FEMALE | sr-RS |
| sv-SE-Standard-A | FEMALE | sv-SE |
| sv-SE-Wavenet-A | FEMALE | sv-SE |
| tā-IN-Standard-A | FEMALE | tā-IN |

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|-------------------|--------|--------|
| tə-IN-Standard-B | MALE | tə-IN |
| tə-IN-Wavenet-A | FEMALE | tə-IN |
| tə-IN-Wavenet-B | MALE | tə-IN |
| te-IN-Standard-A | FEMALE | te-IN |
| te-IN-Standard-B | MALE | te-IN |
| th-TH-Standard-A | FEMALE | th-TH |
| tr-TR-Standard-A | FEMALE | tr-TR |
| tr-TR-Standard-B | MALE | tr-TR |
| tr-TR-Standard-C | FEMALE | tr-TR |
| tr-TR-Standard-D | FEMALE | tr-TR |
| tr-TR-Standard-E | MALE | tr-TR |
| tr-TR-Wavenet-A | FEMALE | tr-TR |
| tr-TR-Wavenet-B | MALE | tr-TR |
| tr-TR-Wavenet-C | FEMALE | tr-TR |
| tr-TR-Wavenet-D | FEMALE | tr-TR |
| tr-TR-Wavenet-E | MALE | tr-TR |
| uk-UA-Standard-A | FEMALE | uk-UA |
| uk-UA-Wavenet-A | FEMALE | uk-UA |
| vi-VN-Standard-A | FEMALE | vi-VN |
| vi-VN-Standard-B | MALE | vi-VN |
| vi-VN-Standard-C | FEMALE | vi-VN |
| vi-VN-Standard-D | MALE | vi-VN |
| vi-VN-Wavenet-A | FEMALE | vi-VN |
| vi-VN-Wavenet-B | MALE | vi-VN |
| vi-VN-Wavenet-C | FEMALE | vi-VN |
| vi-VN-Wavenet-D | MALE | vi-VN |
| yue-HK-Standard-A | FEMALE | yue-HK |
| yue-HK-Standard-B | MALE | yue-HK |
| yue-HK-Standard-C | FEMALE | yue-HK |
| yue-HK-Standard-D | MALE | yue-HK |