

SDK

Make your devices more user-friendly and powerful



Add speech - enhance user experience

The IVONA SDK enables integration of high-quality, advanced Text-to-Speech technology into consumer electronics, mobile applications and server solutions. The IVONA SDK includes easy-to-use IVONA TTS APIs for the development of feature-rich applications that empower intelligent voice user interfaces. The IVONA SDK is available for a variety of operating systems and hardware platforms.

[Request more info](#)

Benefits for you


- Maximum performance on each device - voices are always optimized for your platform.
- Easy integration - you can see code examples illustrating the use of speech libraries.
- Standards-based - utilizes most of the available TTS standards:
 - Dynamic voice and language switching
 - Support for phonetic alphabets
 - Word-highlighting (alignment of text with audio)
 - Visemes (lip-sync), SSML events
 - Prosody control (volume, speed, pitch)
 - User level pronunciation lexicon.


OEM Packages


For developers and hardware manufacturers who prefer to use OS specific TTS APIs for Android and Windows, we offer the following packages:


- Android OEM Package: You will be able to use IVONA TTS through a standard [Android TTS interface](#) in all speech-enabled applications.
- SAPI OEM package: You will be able to use IVONA TTS through a standard [Windows Speech API interface](#) in speech-enabled applications (up to Windows 7)


Recommended SDK Uses


- [Consumer Devices](#)


Deploy cutting-edge speech applications in your products.
- [Connected TV](#)

Add speech to enrich dynamic multimedia content.
- [Automotive](#)

Enable drivers to keep their hands on the wheel, stay connected and drive safely.
- [Announcement Systems](#)

Generate real time speech, support efficient and up-to-date announcements.
- [Accessibility](#)

Remove barriers to information access & improve communications.
- [Education](#)

Improve learning outcomes with Text-to-Speech.
- [Digital Publishing](#)

Create professional recordings and audio content.

Text-to-Speech Cloud

If you want to embed a TTS engine into your application or you need TTS functionality, you may benefit from [IVONA Speech Cloud](#)



IVONA SDK Specifications

Technology	
BrightVoice	Natural lifelike voices resulting from innovative approach to unit selection technology. Reduced unnatural discontinuities, electronic noise, and audible glitches. High accuracy through sophisticated NLP algorithms built into TTS engine. Support for natural reading of short and long texts.
Languages and voices	See voices list at http://www.ivona.com/en/voices-list/
Prosody control	Ability to adjust volume, speech rate and pitch at runtime.
Built-in domains support	IVONA TTS has built-in mechanisms to correctly pronounce texts coming from specific communicative contexts such as social text, acronyms, abbreviations and numbers.
Mixing static expressive prompts	Mechanism to mix static audio prompts with dynamically generated TTS output.
Support for phonetic alphabets	IPA, X-SAMPA, TeleAtlas®, Navteq™
Standards compliance	W3C SSML 1.0/1.1, W3C PLS 1.0 (with IVONA extensions)
Support for text highlighting	Ability to synchronize audio with text through highlighting words and sentences spoken by TTS.
Support for lip synchronization	Ability to provide applications with synchronized stream of visemes – visual representations of sound.
Requirements	
Runtime memory (RAM)	5 - 13 MB
Storage memory	Server solutions > 250 MB Desktop/mobile solutions ~ 150 MB Embedded solutions 60-80 MB
CPU	500MHz
Chipset	x86 (32/64 bit); ARM 7,8,9,11; SH-4
OS	Linux, Windows, Android, iOS, Mac OS X, STLinux
Product features	
Audio formats	PCM 16 bit mono
Sampling rate	8 kHz, 16kHz, 22.05 kHz
User level pronunciation lexicon	✔ (with regular expression rules support)
PLS (Pronunciation Lexicon Specification) support	✔