

[AVFoundation](#) / Speech synthesis

Speech synthesis

Configure voices to speak strings of text.

Overview

The Speech Synthesis framework manages voice and speech synthesis, and requires two primary tasks:

Create an [AVSpeechUtterance](#) instance that contains the text to speak. Optionally, configure speech parameters, such as voice and rate, for each utterance.

```
// Create an utterance.  
let utterance = AVSpeechUtterance(string: "The quick brown fox jumped over the lazy  
  
// Configure the utterance.  
utterance.rate = 0.57  
utterance.pitchMultiplier = 0.8  
utterance.postUtteranceDelay = 0.2  
utterance.volume = 0.8  
  
// Retrieve the British English voice.  
let voice = AVSpeechSynthesisVoice(language: "en-GB")  
  
// Assign the voice to the utterance.  
utterance.voice = voice
```

Pass the utterance to an [AVSpeechSynthesizer](#) instance to produce spoken audio.

```
// Create a speech synthesizer.  
let synthesizer = AVSpeechSynthesizer()
```

```
// Tell the synthesizer to speak the utterance.
```

Optionally, use the speech synthesizer instance to control or respond to ongoing speech; for example, assign its `delegate` to receive speech event notifications.

Note

Speech generation occurs on device and isn't sent to a server for processing.

Topics

Spoken text attributes

`class AVSpeechUtterance`

An object that encapsulates the text for speech synthesis and parameters that affect the speech.

`class AVSpeechSynthesisVoice`

A distinct voice for use in speech synthesis.

Speech synthesis controls

`class AVSpeechSynthesizer`

An object that produces synthesized speech from text utterances and enables monitoring or controlling of ongoing speech.

Speech synthesis audio unit

`class AVSpeechSynthesisProviderAudioUnit`

An object that generates speech from text.

See Also

Audio

≡ Audio playback, recording, and processing

Play, record, and process audio; configure your app's system audio behavior.