



Agora Native SDK Release Notes

v1.7

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Introduction

Agora Communications as a Service (CaaS) provides Quality of Experience for worldwide Internet-based voice and video communications through the Agora Global Software-Defined Real-time Network(SD-RTN), which is tailored and optimized for real-time and mobile-to-mobile communications. Agora CaaS solves quality of experience challenges for mobile devices, such as 3G/4G/Wi-Fi networks with erratic performance as well as global Internet bottlenecks.

Agora CaaS includes the following SDKs:

Agora Native SDK

Agora Native SDK provides the audio and video communication functions, and the applications using the Native SDK link it directly into the application when they are built:

| Agora Native SDK | Communication | Live Broadcast |
|------------------------------|---------------|----------------|
| Agora Native SDK for Android | √ | √ |
| Agora Native SDK for iOS | √ | √ |
| Agora Native SDK for Windows | √ | √ |
| Agora Native SDK for Mac | √ | √ |
| Agora Native SDK for Web | √ | |

Agora Signaling SDK

Agora Signaling SDK provides reliable audio and video control services.

- Agora Signaling SDK for Android
- Agora Signaling SDK for iOS
- Agora Signaling SDK for Windows
- Agora Signaling SDK for Mac

See agora.io for more information.

Overview of Agora Native SDK v1.7

This release of the Agora Native SDK includes the following SDKs for different platforms (the current minor version numbers for each platform are noted in [Downloading the SDKs](#)):

- 🔗 Agora Native SDK for Windows v1.7
- 🔗 Agora Native SDK for Mac v1.7
- 🔗 Agora Native SDK for iOS v1.7
- 🔗 Agora Native SDK for Android v1.7
- 🔗 Agora Native SDK for Web v1.7

Agora Native SDK supports both voice/video communication and. Applications built on different platforms have the ability to interoperate with each other.

Downloading the SDKs

All the Agora Native SDKs are available for downloads at <http://www.agora.io/downloads/>.

Package

The following package files are available for v1.7:

- 🔗 Agora_Native_SDK_for_iOS_v1_7_0_VOICE.zip
- 🔗 Agora_Native_SDK_for_iOS_v1_7_0_FULL.zip
- 🔗 Agora_Native_SDK_for_Android_v1_7_0_VOICE.zip
- 🔗 Agora_Native_SDK_for_Android_v1_7_0_FULL.zip
- 🔗 Agora_Native_SDK_for_Windows_v1_7_0_FULL.zip
- 🔗 Agora_Native_SDK_for_Mac_v1_7_0_FULL.zip
- 🔗 Agora_Native_SDK_for_Web_v1_7_0_FULL.zip

For iOS and Android, the SDK currently comes in two packages: voice-only (tagged “VOICE”) and voice plus video (tagged “FULL”). Use the voice-only SDK package if you are only focused on voice applications for iOS and Android and want smaller libraries and configuration. Otherwise use the larger voice and video “FULL” package for general development. In future releases, these two options may be included as components in a single package. For Agora Native SDK for Windows, Mac and Web, each SDK is available in a single full voice and video package.

Documentation

Reference manuals are available from [our website](#) and are also included within each SDK package (in the doc/ sub-folder).

- 🔗 Agora Native SDK for iOS Reference Manual v1.7
- 🔗 Agora Native SDK for Android Reference Manual v1.7
- 🔗 Agora Native SDK for Windows Reference Manual v1.7
- 🔗 Agora Native SDK for Mac Reference Manual v1.7
- 🔗 Agora Native SDK for Web Reference Manual v1.7

Use the following documents together with the corresponding reference manual:

- 🔗 **Agora Recording Server User Guide:**
Use this document to enable the recording function if required.
- 🔗 **Agora Whiteboard SDK Reference Manual**
Use this document to enable the whiteboard function if required.
- 🔗 **Agora Image Enhancement User Guide**
Use this document to enable the image enhancement function if required.

All documents are available at:

- 🔗 Downloads: <http://www.agora.io/downloads/>
- 🔗 Online: <http://docs.agora.io/en/>

New and Changed from v1.6 to v1.7

New and Changed in v1.7

General

Aside from supporting video/audio communication, Agora Native SDK now officially supports live broadcast. Users can call the setChannelProfile method to select which scenario to use.

The following lists the main functions in the live broadcast:

| Function | Description | Platform |
|-------------------------|---|-------------------------|
| Host in and Push Stream | Client Host in + Client Push Stream (3 modes) Client Host in + Server Push Stream (2 modes) One Agora channel supports up to 7 video hosts interacting with each other simultaneously in real-time live broadcast | Android/iOS/Windows/Mac |
| Social Sharing | The users can generate a URL from the app, and open the url in a web browser to watch the Bypass Live or post the url on any social media platform for social sharing. | Android/iOS/Windows/Mac |
| Recording and Storage | The users can record and store the live broadcast at the CDN side | Android/iOS/Windows/Mac |
| Picture-in- | The users can adjust the picture-in-picture layouts | Android/iOS/Windows/Mac |

| | | |
|---------------------------|--|-------------------------|
| picture layout adjustment | dynamically: <ul style="list-style-type: none"> Layered Windows (1+N hosts) Tile Horizontally (2 hosts) Tile Vertically (3 hosts) | |
| Image Enhancement | The users can integrate the preprocessor for image enhancement if necessary. | Android/iOS |
| Single or Dual Streams | The host has the option to send single or dual streams(high stream or low stream, determined by resolution, frame rate and bitrate.) | Android/iOS/Windows/Mac |

For more details, refer to each platform reference manual.

Agora Native SDK for iOS Specific Changes

Added the API `setDefaultAudioRouteToSpeakerphone` sets whether the received audio is routed to the earpiece or the speakerphone.

Agora Native SDK for Web Specific Changes

Updated the js file.

Known Issues and Limitations

Encryption

- Currently, the built-in encryption does not interoperate with the Web SDK (based on Web RTC).

Screen Sharing

- Users can employ the whiteboard function on Agora-supported platforms for Web, Mac and Windows. On iOS and Android, users have view-only permission.

Agora Native SDK for Web

- Agora Native SDK for Web:
 - The maximum supported video resolutions are 720p at 15fps and 480p at 30fps.
 - The table below shows currently supported browsers. Using an unsupported browser (for example, Opera, Firefox) can result in unexpected errors.

| Platform | Browser | Requirements |
|------------|---------|------------------------|
| Windows | Edge | 25.10586.0.0 |
| Windows 10 | Chrome | 51.0.2704.103(64 bit)* |
| Mac | Safari | 9.1.1(11601.6.17) |

*Chrome is supported on Windows at 640x480p 30 fps resolution. Other higher resolutions will be supported in future releases

Agora Native SDK for Android

- To use the startAudioMixing API, ensure that the Android device is ≥ 4.2 , and API Level ≥ 16 .

Agora Native SDK for iOS

- To use the startAudioMixing API, ensure that the iOS device is ≥ 8.0 .

Agora Native SDK for Windows

If you use a camera driver which is not Microsoft official program, the video image may display with random errors, for example,

