

# **Tencent Real-Time Communication Release Notes and Announcements Product Documentation**



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# Release Notes and Announcements

## Release Notes

Last updated : 2024-03-07 11:27:19

### March 2024

Update	Description	Release Date	Document
Version 11.7 release	<p>Full platform:</p> <ul style="list-style-type: none"><li>Add new Warning codes for camera capture.</li><li>Adjust the gravity sensing API, see <code>setGravitySensorAdaptiveMode</code> .</li><li>Support callback for local voice volume information, see <code>enableAudioVolumeEvaluation</code>.</li><li>Optimize room entry process to significantly reduce the time taken for secondary room entry.</li><li>Dashboard monitors the maximum number of end-to-end call quality for a single user, increasing from 16 to 50 channels.</li></ul> <p>iOS:</p> <ul style="list-style-type: none"><li>Optimize the capture restart logic after system interruption to reduce the probability of capturing silence.</li><li>Optimize Unity 3D engine compatibility issues.</li><li>Improve the focusing effect of rear triple and dual camera capture, increasing the focusing speed.</li></ul> <p>Android:</p> <ul style="list-style-type: none"><li>Optimize the parameters and calling order of the system capture audio API to reduce the probability of capturing only noise and improve the sound capture effect.</li></ul>	2024-03-04	<a href="#">SDK Download</a>

### January 2024

Update	Description	Release Date	Document
Version 11.6 release	Full platform:	2024-01-15	

	<p>Optimized poor network performance of audio in low-bandwidth conditions.</p> <p>Optimized poor network performance of video in low-bandwidth conditions.</p> <p>Optimized poor network audio quality under high packet loss and high latency conditions.</p> <p>Optimized SDK overall stability.</p> <p>iOS: Added Picture-in-Picture support for `TXLivePlayer`.</p> <p>Android&amp;iOS: Optimized the success rate of playing BGM with URL.</p> <p>Windows: Added support for capturing audio from specific application. For more details, see <code>startSystemAudioLoopback</code>. Optimized and adapted to Intel HEVC software decoder (Quick Sync Video).</p>		<a href="#">SDK Download</a>
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## November 2023

Update	Description	Release Date	Document
Version 11.5 release	<p>All platforms:</p> <p>Optimized overall performance and stability of video modules.</p> <p>Optimized overall stability for audio modules.</p> <p>Optimized the behavioral policies of certain APIs. For details, see Adjustments of API Behaviors.</p> <p>Optimized the overall policy and performance consumption of the audio background music module to reduce background music playback exceptions.</p> <p>When video setting resolution is set at 540P vertical screen (expected 540×960), the specific codec processing resolution is adjusted from 544×960 to 536×960.</p> <p>Adjusted the callback interval for background music progress callback <code>onPlayProgress</code> from 200 ms to 300 ms.</p> <p>Adjusted the internal implementation of the background music module to single instance. In a multi-instance scenario, musicID needs to be globally unique. When developers use sub instances to play background music, please ensure every instance uses a unique musicID.</p>	2023-11-27	<a href="#">SDK Download</a>

	<p>Changed the local recording event status code to asynchronous return. After related APIs are called, 0 is returned by default. The specific status code can be obtained through the corresponding event callback.</p> <p>Initiating the record event callback</p> <p><code>onLocalRecordBegin</code> requires the adjustment of the <a href="#">status code</a>.</p> <p>Android: Optimized the playback performance in scenarios with TRTC + VODPlayer.</p> <p>iOS&amp;Mac: Optimized the performance when Metal is used for pre-processing and rendering.</p> <p>iOS&amp;Android: Optimized the continuity of screen sharing on mobile devices. The last frame is maintained and sent when sharing is paused, with a frame rate of 1 to 2 FPS. Adjusted gravity sensor response behaviors, which only affect turning on or off the gravity sensor switch.</p> <p>Windows: Optimized the HEVC hardware decoding policy, to be compatible with AMD and Nvidia graphics cards. Optimized overall performance of screen sharing, thus increasing the frame rate and stability of screen capture.</p>		
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## August 2023

Update	Description	Release Date	Document
Version 11.4 release	<p>All platforms: For <a href="#">TRTCLocalRecordingParams</a> , added <code>maxDurationPerFile</code> to control the duration of segment recording. The segment file can be obtained through <a href="#">onLocalRecordFragment</a> callback.</p> <p>Enhanced and optimized overall performance in an IPv6 network environment.</p> <p>Optimized precise lyric alignment in chorus performance scenarios.</p>	2023-08-30	<a href="#">SDK Download</a>

	<p>Optimized the AI noise reduction algorithm to further improve noise reduction effect.</p> <p>Enhanced the smoothness of audience steam pulling in pure audio scenarios.</p> <p>Optimized the smoothness of <a href="#">switchRoom</a> room switching, avoiding any blackout frames.</p> <p>Android:</p> <p>Optimized the callback notification when the microphone is muted by the system.</p> <p>Optimized the adaption logic of the gravity sensor for specific custom Android devices, to prevent incorrect screen rotation angle when the device returns an incorrect gravity sensor direction.</p> <p>Optimized the rendering process to support real-time screen following during View double-finger zooming, upgrading the user experience during float-window playback.</p> <p>Android&amp;iOS:</p> <p>Added an API for rendering pattern settings for the local preview of V2TXLivePusher stream push. <a href="#">setRenderFillMode</a>.</p> <p>Optimized and improved the instant launch rate for live streaming.</p> <p>Optimized the audio collection policy, reducing the possibility of silence due to collection device exceptions.</p> <p>iOS:</p> <p>Optimized the audio capturing policy when the app is in the background, reducing the probability of silence issues caused by system interruptions.</p> <p>Optimized and improved the restart speed of the audio device.</p> <p>Mac:</p> <p>Added <code>enableCrashMonitoring</code> , which supports capturing crash information and local storage. When you use it, add <b>TXCCrashMonitor.framework</b> to your project.</p>		
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## July 2023

Update	Description	Release Date	Document

Version 11.3 release	<p>All platforms:</p> <p>Added the keystone correction feature for video display (exclusive for the Professional version), which allows for manual correction of angle distortions of images with transparent view. For details, see <a href="#">setPerspectiveCorrectionPoints</a>.</p> <p>Added audio spectrum callback, used for sound wave animation or volume spectrum display. For details, see <a href="#">enableAudioVolumeEvaluation</a> and <a href="#">TRTCVolumeInfo</a>.</p> <p>Added the reverb effect Recording Studio 2. For details, see <a href="#">TXVoiceReverbType</a>.</p> <p>Added SEI parameter settings for the stream mixing API, used for SEI passthrough during CDN distribution. For details, see <a href="#">TRTCTranscodingConfig</a>.</p> <p>Android:</p> <p>Optimized the audio acquisition and playback logic to prevent abnormal sound issues on some Android devices.</p> <p>Optimized the performance of the secondary video stream coding to improve the quality of shared screen images.</p> <p>Android&amp;iOS:</p> <p>Added support of .ogg format music files to <a href="#">startPlayMusic</a> .</p> <p>Deleted VOD-related APIs for TXLivePlayer. Please use TXVodPlayer for VOD.</p> <p>iOS:</p> <p>Optimized the audio device restart logic, reducing sound interruptions.</p> <p>Flutter:</p> <p>Added the <code>setSystemAudioLoopbackVolume</code> method (iOS).++</p>	2023-07-07	<a href="#">SDK Download</a>
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## June 2023

Update	Description	Release Date	Document
Version 11.2 release	<p>All platforms:</p> <p>Supported seamless switching between the music without vocal and original vocal in chorus scenarios. For details, see <a href="#">setMusicTrack</a>.</p>	2023-06-05	<a href="#">SDK Download</a>



Optimized overall audio quality for chorus scenarios, enhancing chorus effect and reducing chorus latency.  
Enhanced audio effects when you take or leave the microphone, providing a smoother experience.  
Optimized audio experience under extreme poor network conditions.  
Optimized the experience when a single host pushes streams in live streaming under poor network conditions.  
Optimized the smoothness of large and small stream switching process in video call scenarios.

#### Android:

Added support for the x86 architecture for the Professional version and the Smart version. It can be obtained through Maven.  
To be compliant with the operating system requirements of Android 12 and later, a foreground service is initiated during screen collection. For details, see: [EnableForegroundService](#).  
Optimized hardware decoding latency, enhancing first-frame experience.  
Optimized the earphone monitor function, enhancing the experience of turning on and off the earphone monitor.  
Optimized the collection compatibility of Android devices, reducing audio exceptions.

#### Android&iOS:

Optimized the audio performance in music scenarios, enhancing the chorus experience.  
Optimized the experience of using Bluetooth headphones under various volume types.

#### iOS:

Supported SDK running on Apple chip devices through Xcode simulator.  
Optimized the image quality, elevating the video experience.

#### Mac:

Supported returning information such as width and height when screen window information is obtained. This feature aligns with Windows. For details, see: `TXCScreenSourceInfo`.

## April 2023

Update	Description	Release Date	Document
Version 11.1 release	<p>All platforms: Added onVoiceEarMonitorAudioFrame data callback for accessing or modifying earphone monitor data.++ Renamed data callback onCapturedRawAudioFrame to onCapturedAudioFrame. Optimized the automatic clean-up logic for log files, preventing excessive volume of the log folder.</p> <p>Android: Optimized the issue of occasional hardware coding launch failures in high-resolution scenarios on low-end devices, which increased performance overhead. Optimized the issue of occasional uncontrollable hardware coding rate in Android 12 and above systems. Optimized the issue of low volume for the collected audio of the host in the chorus scenario on a few models. Optimized the issue of occasional severe loud noises of audio in chorus scenarios.</p> <p>iOS&amp;Android: Optimized color matrix compatibility during decoding and rendering, preventing color biases.</p> <p>Mac: Window sharing supports the PowerPoint presentation mode.</p>	2023-04-17	<a href="#">SDK Download</a>

## March 2023

Update	Description	Release Date	Document
Version 11.0 release	<p>All platforms: Optimized the success rate of online background music playback under poor network conditions. Optimized the smoothness of initial frame playback in the scenario of entering the room in VideoCall.</p> <p>Android: API change. Adjusted the returned information type of TXLiveBase.setLibraryPath to bool, indicating whether the</p>	2023-03-08	<a href="#">SDK Download</a>

	<p>SDK library has been loaded.</p> <p>Optimized audio compatibility, reducing issues of electrical hums and no sound.</p>		
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## February 2023

Update	Description	Release Date	Document
TRTC monthly package release	Introduced the brand new TRTC monthly packages (Free, Standard, Premium, and Flagship), providing corresponding value-added service options for subscribed applications (SDKAppID) in a variety of scenarios.	2023-02-15	<a href="#">Feature and Billing Explanation</a>

## January 2023

Update	Description	Release Date	Document
Version 10.9 release	<p>All platforms:</p> <p>Optimized the audio-to-video synchronization, enhancing the smoothness of video playback.</p> <p>Reduced the upstream latency in some scenarios under poor network conditions, enhancing the interactive effects of video calls.</p> <p>Android:</p> <p>Added support for audio pick-up from an external microphone device, such as a lavalier microphone.</p> <p>Optimized the issue of the external sound in the media volume after inserting headphones are inserted for a few models.</p> <p>Windows&amp;Android:</p> <p>Optimized the issue where setting music quality in specific scenarios may result in sound blasting.</p> <p>iOS:</p> <p>Optimized external screen recording to be automatically adjusted to the system orientation during system screen rotation, enhancing the user experience on the viewing side.</p>	2023-01-09	<a href="#">SDK Download</a>

	<p>Mac:</p> <p>Optimized the screen recording performance on MacOS 12.3 and later, reducing the CPU overhead and memory usage.</p>		
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## October 2022

Update	Description	Release Date	Document
Version 10.8 release	<p>All platforms:</p> <p>Introduced the disc-scratching sound effect to enhance the comprehensive online karaoke experience. For details, see: <a href="#">TXAudioEffectManager.setMusicScratchSpeedRate</a>.</p> <p>Optimized the accuracy of NTP time. For details, see: <a href="#">TXLiveBase.updateNetworkTime</a>.</p> <p>Android: Optimized the video decoding launch speed, effectively improving the image's instant launch speed that can be as fast as 50 ms.</p>	2022-10-31	<a href="#">SDK Download</a>

## September 2022

Update	Description	Release Date	Document
Version 10.7 release	<p>All platforms:</p> <p>Stream mix supports adjusting the volume of each input stream. For details, see <a href="#">TRTCMixUser.soundLevel</a>.</p> <p>Added <a href="#">onRemoteAudioStatusUpdated</a> callback API, which can be used to better identify and monitor the status of remote audio streams.</p> <p>Upgraded the encoding kernel to enhance the image quality in screen sharing scenarios.</p> <p>Optimized the encoding control effects under poor network conditions.</p>	2022-09-20	<a href="#">SDK Download</a>
Console release	Released the Monitoring Dashboard > Data Dashboard feature, providing the application-dimensioned business operation dashboard data query feature.	2022-09-20	<a href="#">Feature Description</a>

<p>SDK 10.7  <code>startPlay</code>                      API name change</p>	<p>Starting from version 10.7 for mobile devices (iOS &amp; Android), the name of the mobile start playback API <code>startPlay</code> will change, as detailed below:  <code>V2TXLivePlayer</code>'s <code>startPlay</code> has been renamed to <code>startLivePlay</code> .  <code>TXVodPlayer</code>'s <code>startPlay</code> has been changed to <code>startVodPlay</code> .</p>	<p>2022-09-19</p>	<p>Announcement Regarding the Renaming of the startPlay API in the Tencent Real-Time Communication (TRTC) SDK</p>
<p>Version 10.6 release</p>	<p>All platforms:                      Improved the speed of room entry under an IPv6 network environment.                      Optimized audio recovery efficiency and audio-visual synchronization effects in poor network environments, enhancing the call experience.                      Enhanced the capability to maintain connectivity in poor network conditions, reducing the probability of disconnection and reconnection.                      Optimized the Music gear selection (specified during <code>startLocalAudio</code>) to address the issue of lower volume, enhancing user experience.</p> <p>Mac:                      Enhanced communication experience when Bluetooth headphones are used, producing less static noise and clearer sound.</p> <p>Android:                      Enhanced the compatibility for stereo sound capture, supporting an expanded range of device types.                      Optimized occasional echo issues to enhance the communication experience.</p>	<p>2022-09-05</p>	<p><a href="#">SDK Download</a></p>

## August 2022

Update	Description	Release Date	Document
<p>Version 10.5 release</p>	<p>All platforms: Optimization of QoS policies, enhancing the experience in poor network conditions.</p> <p>iOS&amp;Android:</p>	<p>2022-08-23</p>	<p><a href="#">SDK Download</a></p>

	<p>Full link latency reduction; Optimized aural return experience.</p> <p>Android: Optimized video decoding memory management, preventing memory accumulation.</p> <p>Windows: Refined noise reduction effects of built-in microphone, exhibiting superior performance particularly in music patterns.</p> <p>Mac: Augmented reduction of static noise issues potentially arising during mic capture activation.</p>		
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## July 2022

Update	Description	Release Date	Document
<p>SDK 10.4 release</p>	<p>iOS &amp; Android: Added support for the RGBA32 format for custom capturing. For details, see <code>sendCustomVideoData</code> .</p> <p>Windows &amp; macOS: You can now preview watermarks after watermark configuration. For details, see <code>setWaterMark</code> .</p> <p>Android: Improved the compatibility of low-latency in-ear monitoring and dual-channel capturing.</p> <p>Optimized the policy for switching from hardware to software decoding.</p> <p>iOS: Fixed the issue of low capturing volume on iPad.</p>	<p>2022-07-25</p>	<p><a href="#">SDK download</a></p>

<p>SDK 10.3 release</p>	<p>All platforms: Improved audio quality in the <code>Music</code> mode.</p> <p>Windows &amp; macOS: Added a parameter to <code>startMicDeviceTest</code> , which allows you to specify whether to play the audio captured during mic testing. For details, see the description of <code>startMicDeviceTest</code> .</p> <p>Windows: Added support for recording live streaming sessions and audio/video calls to local storage. For details, see the description of <code>ITXLiteAVLocalRecord</code> .</p>	<p>2022-07-08</p>	<p><a href="#">SDK download</a></p>
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## June 2022

Update	Description	Release Date	Document
<p>SDK 10.2 release</p>	<p>All platforms: Launched a new API for stream mixing and relaying, which offers more powerful features and greater flexibility. For details, see the description of <code>startPublishMediaStream</code>.</p> <p>Added support for 3D spatial audio. For details, see the description of <code>enable3DSpatialAudioEffect</code>.</p> <p>Added support for voice activity detection. This feature works even when local audio is muted ( <code>muteLoalAudio</code> ) or the capturing volume is set to zero ( <code>setAudioCaptureVolume</code> ). It allows you to remind users when they are talking but have not turned their mics on. For details, see the description of <code>enableAudioVolumeEvaluation</code>.</p> <p>Added support for checking a user's permission when they switch roles. For details, see the description of <code>switchRole(TRTCRoleType role, const char* privateMapKey)</code>.</p>	<p>2022-06-23</p>	<p><a href="#">SDK download</a></p>

	<p>iOS: Optimized the processing of upstream video data, reducing CPU and GPU usage.</p> <p>iOS &amp; macOS: The C++ API for custom pre-processing added support for using textures for video processing.</p> <p>Android:  Optimized in-ear monitoring, reducing latency.  Optimized audio capturing, fixing the issue of noise on some devices.</p> <p>Windows: Reduced memory fragmentation and performance overhead.</p> <p>Windows &amp; macOS: Improved encoding for screen sharing. The height and width of the output video are no longer limited by the window size.</p>		
SDK 10.1 release	<p>All platforms:  Allowed smooth role switch. Audio/Video playback is no longer interrupted by role switch.  Optimized echo cancellation for the music scenario, delivering a more natural audio experience.  Optimized the audio quality and startup effect after the role is switched and <code>muteLocalAudio</code> is called.  Optimized the <code>onSpeedTest</code> callback.</p>	2022-06-06	<a href="#">SDK download</a>



	<p>iOS:</p> <p>Added support for stereo audio capturing.</p> <p>Optimized memory management to avoid heap memory issues.</p> <p>Android:</p> <p>Added support for capturing system audio ( <code>startSystemAudioLoopback</code> ) on Android 10 and later.</p> <p>Reduced the delay of in-ear monitoring on certain phones.</p> <p>Windows:</p> <p>Optimized the rendering of downstream video data.</p> <p>Optimized the stereo capturing logic to effectively avoid the problem of echo.</p>		
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## May 2022

Update	Description	Release Date	Document
SDK 10.0 release	<p>All platforms:</p> <p>Sped up the callbacks for room entry and exit ( <a href="#">onRemoteUserEnterRoom</a> and <a href="#">onRemoteUserLeaveRoom</a> ).</p> <p>Windows:</p> <p>Optimized screen sharing, improving the performance notably when the window filtering feature is not used.</p>	2022-05-17	<a href="#">SDK download</a>
SDK 9.9	Android:	2022-05-	<a href="#">SDK</a>

release	<p>Reduced capturing latency, improving in-ear monitoring experience.</p> <p>Windows:</p> <p>Optimized video delivery, reducing overhead.</p> <p>Optimized processing before the capturing of computer audio, retaining the dual-channel effect.</p> <p>macOS:</p> <p>Fixed audio cracking when the capturing volume is too high, improving audio experience.</p> <p>Improved the video quality of screen sharing (the substream)</p>	06	<a href="#">download</a>
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## April 2022

Update	Description	Release Date	Document
SDK 9.8 release	<p>All platforms: Improved the SDK performance in video scenarios.</p> <p>Windows:</p> <p>Added APIs for audio effects such as heavy metal and little girl. For details, see <code>ITXAudioEffectManager.setVoiceChangerType</code>.</p> <p>Added support for showing an image when local video is paused.</p>	2022-04-21	<a href="#">SDK download</a>
SDK 9.7 release	<p>iOS &amp; Android: Improved audio quality in the music mode.</p>	2022-04-06	<a href="#">SDK download</a>

	<p>Windows:</p> <p>Improved audio quality and reduced audio loss in the music mode.</p> <p>Improved compatibility with high-end sound cards, boosting audio quality.</p> <p>Optimized audio mixing with third-party processes for more scenarios.</p>		
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## March 2022

Update	Description	Release Date	Document
SDK 9.6 release	<p>All platforms:</p> <p>Enhanced third-party library compliance with regulations inside and outside the Chinese mainland.</p> <p>Reduced the SDK storage footprint. For details, see <a href="#">Release Notes (App)</a>.</p> <p>Fixed known issues, improving stability.</p> <p>Windows:</p> <p>Updated the live streaming component from V1 to V2 APIs, improving its stability.</p> <p>Improved compatibility with the GPUs of low-end devices.</p> <p>iOS:</p> <p>Fixed occasional overexposure when fill lights are used.</p> <p>Android:</p>	2022-03-24	<a href="#">SDK download</a>

	<p>Improved pre-processing methods for beauty filters and other features, fixing capturing stutter on low-end devices.</p> <p>macOS: Optimized texture uploading.</p>		
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## January 2022

Update	Description	Release Date	Document
SDK 9.5 release	<p>All platforms: Improved the smoothness of calls under poor network conditions.</p> <p>Windows: Fixed occasional failure to start cameras and the issue where some cameras fail to capture videos at the specified frame rate, improving browser compatibility.</p> <p>iOS: Improved compatibility with rendering components such as Cocos2d.</p> <p>Android: Fixed the issue where, after an anchor turns the camera off and on again, at the player end, before the anchor's video is played as expected, the last frame before the camera is turned off is shown first.</p>	2022-01-11	<a href="#">SDK download</a>

## December 2021

Update	Description	Release Date	Document

SDK 9.4 release	<p>All platforms:</p> <p>Sped up room entry, reducing the fluctuation in room entry speed.</p> <p>Supported highlighting the speaking user, which is useful in large-scale audio co-anchoring scenarios. It enables users to focus on the audio of whoever is speaking when there are multiple speakers in the room. You can call the <a href="#">setRemoteAudioParallelParams</a> API to set this feature.</p> <p>Windows:</p> <p>Optimized the audio gain control algorithm, fixing the issue of marked noise due to high audio gain on some devices.</p> <p>iOS:</p> <p>Supported background music files in 24-bit WAV format.</p> <p>Android:</p> <p>Made the capturing resolution in line with the resolution of the screen during screen sharing to avoid black bars.</p> <p>Improved the compatibility of the hardware video decoder, fixing the issue of black bars due to change of playback resolution on some devices.</p> <p>Android &amp; iOS:</p> <p>This version complies with China's privacy and security regulations and has been tested by multiple Tencent products.</p> <p>macOS:</p> <p>Supported dual channels for the system audio capturing API <a href="#">startSystemAudioLoopback</a>.</p> <p>Fixed the issue of high CPU and memory usage when mouse cursor is captured during screen sharing.</p>	2021-12-08	<a href="#">SDK download</a>
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## November 2021

Update	Description	Release Date	Document
SDK 9.3 release	<p>All platforms:</p> <p>Improved instant streaming performance under poor network conditions.</p> <p>Optimized the QoS control policy under poor network conditions, ensuring smoother communication.</p> <p>Improved support for TCP for better adaptability to different network environments.</p> <p>Improved the speed test to support testing the current bandwidth.</p>	2021-11-03	<a href="#">SDK download</a>

## September 2021

Update	Description	Release Date	Document
SDK 9.2 release	<p>All platforms:</p> <p>Allowed audio pitch setting.</p> <p>Optimized the jitter control algorithm under poor network conditions, enabling smoother video playback.</p> <p>Windows:</p> <p>Enabled adaptive echo cancellation for the <code>TRTCAudioQualityMusic</code> mode to automatically balance between audio quality and echo cancellation strength.</p>	2021-09-23	<a href="#">SDK download</a>

	<p>Improved the AGC algorithm, reducing cases of excessively low or high volume.</p> <p>Android &amp; iOS:</p> <p>Supported SOCKS5 proxies.</p> <p>Optimized the 3A policy for the duet mode.</p> <p>Android:</p> <p>Fixed the issue where the “Application Not Responding” error occurs during hardware decoding.</p> <p>Fixed the compatibility issue for the rotation of local camera preview.</p> <p>Improved instant streaming performance.</p>		
SDK 9.1 release	<p>All platforms:</p> <p>Supported using a C++ API to set the format of called back audio frames.</p> <p>Improved experience under poor network conditions.</p> <p>Windows:</p> <p>Supported streaming VOD files in AC3 format.</p> <p>Supported getting the resolutions supported by a camera. For details, please see <a href="#">ITXDeviceCollection.getDeviceProperties</a>.</p> <p>Supported NVIDIA, Intel, and AMD hardware decoding.</p> <p>macOS:</p> <p>Supported recording local media.</p> <p>Android:</p>	2021-09-04	<a href="#">SDK download</a>

	<p>Improved audio status management during room exit.</p> <p>Improved the logic of recovery in the case of audio capturing failure, to increase the success rate of audio capturing.</p> <p>Fixed video overexposure under certain conditions.</p>		
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## August 2021

Update	Description	Release Date	Document
SDK 9.0 release	<p>All platforms:</p> <p>Allowed setting the volume of custom audio tracks. For details, please see <a href="#">setMixExternalAudioVolume</a>.</p> <p>Separated audio and video packet loss in the status callback. For details, please see <a href="#">TRTCRemoteStatistics</a>.</p> <p>Optimized the subscription process to improve instant streaming performance for manual subscription.</p> <p>Fixed the issue of repeated <code>onExitRoom</code> callback in some scenarios.</p> <p>iOS:</p> <p>Allowed setting the capturing volume of system audio. For details, please see <a href="#">setSystemAudioLoopbackVolume</a>.</p>	2021-08-06	<a href="#">SDK download</a>

## July 2021

Update	Description	Release Date	Document
SDK 8.9 release	<p>All platforms:</p> <p>Fixed shaky audio in some scenarios.</p>	2021-07-15	<a href="#">SDK download</a>



Supported cloud proxies, which are a secure and easy way to access TRTC from inside a corporate firewall.

Added the stream type parameter to the APIs

`muteLocalVideo` and `muteRemoteVideoStream` .

Added the gateway RTT parameter `gatewayRtt` to the status callback `onStatistics` , which indicates the quality of network between users and their Wi-Fi routers.

Supported recording audio into more formats using the

`startAudioRecording` API.

Android:

Improved instant streaming performance.

Upgraded the audio pre-processing algorithm for clearer audio in calls.

Supported specifying external GL contexts for custom capturing, allowing more flexible use of OpenGL contexts.

Windows:

Supported NVIDIA hardware encoding, improving stream publishing performance.

Allowed specifying the speaker for system audio capturing

( `startSystemAudioLoopback` ).

## June 2021

Update	Description	Release Date	Document
SDK 8.8 release	All platforms: Made it easier to use <code>mixExternalAudioFrame</code> . You no longer need to call the API at a regular interval.	2021-06-21	<a href="#">SDK download</a>

	<p>Android &amp; macOS &amp; iOS: Allowed playing audio via peripheral devices. For details, please see <a href="#">enableCustomAudioRendering</a>.</p> <p>macOS: Reduced the CPU usage of screen sharing when mouse cursor capturing is enabled.</p> <p>Windows:  Made AGC faster and more timely for better results. Reduced the performance overhead of screen sharing when the window filtering feature is enabled.</p>		
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## May 2021

Update	Description	Release Date	Document
SDK 8.7 release	<p>All platforms:</p> <p>Supported anomaly detection for peripheral audio devices. After registering the <code>onStatistics</code> callback, you can detect in real time when there is no audio for a long time and when audio cracks or is interrupted via the <code>audioCaptureState</code> field of <code>TRTCLocalStatistics</code>.</p> <p>Improved the management of background music resources, ensuring that memory is freed up in a timely manner.</p> <p>Ensured that audience receive the <code>onUserVideoAvailable(false)</code> callback in a timely manner after stream publishing is paused because the application is switched to the background.</p> <p>macOS: Reduced the CPU and memory usage of screen sharing when mouse cursor capturing is enabled.</p> <p>Windows: Supported RGBA video data for custom capturing.</p>	2021-05-25	<a href="#">SDK download</a>

<p>SDK 8.6 release</p>	<p>All platforms:</p> <p>Optimized the QoS control algorithm, enhancing audio/video transmission quality.</p> <p>Improved audio playback smoothness when users switch between anchor and audience.</p> <p>iOS &amp; macOS &amp; Windows: Optimized the audio processing module, improving audio quality in the speech and default modes.</p> <p>iOS &amp; macOS: Improved the adaptability of custom audio capturing to situations of high CPU usage.</p> <p>iOS &amp; Android: Supported publishing screen recording data via the substream, as in SDKs for desktop platforms.</p> <p>Windows: Optimized the memory allocation logic, enhancing stability.</p> <p>macOS: Added native support for Apple M1.</p>	<p>2021-05-08</p>	<p><a href="#">SDK download</a></p>
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## March 2021

Update	Description	Release Date	Document
<p>SDK 8.5 release</p>	<p>All platforms:</p> <p>Supported publishing VOD content. You can now bind <code>TXVodPlayer</code> with <code>TRTCCloud</code> and publish the content played by VOD via TRTC's substream.</p> <p>Supported custom capturing of substream data.</p> <p>Supported custom audio mixing. You can feed a custom audio track into the SDK's audio processing. The SDK will mix the two tracks before publishing.</p>	<p>2021-03-24</p>	<p><a href="#">SDK download</a></p>

	<p>Supported mixing only video streams, allowing more flexible stream mixing control.</p> <p>Added end-to-end latency to status callback.</p> <p>Windows: Supported automatic switch to the slideshow window when a slideshow is selected for screen sharing.</p> <p>macOS: Optimized the screen sharing feature. You can now share other windows along with the target window. For details, see the API <a href="#">addIncludedShareWindow</a>.</p> <p>The <code>startSystemAudioLoopback</code> API supported dual sound channels.</p>		
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## February 2021

Update	Description	Release Date	Document
SDK 8.4 release	<p>All platforms:</p> <p>Supported local recording. An anchor can now record local audio and video into an MP4 file during streaming. For details, see <a href="#">startLocalRecording</a>.</p> <p>Improved the audio quality in the <a href="#">Music</a> mode, which makes it more suitable for Clubhouse-like audio streaming scenarios.</p> <p>Improved the adaptability to poor network conditions across the audio-video link. Smooth audio and video can be delivered even when the packet loss rate reaches 70%.</p>	2021-02-08	<a href="#">SDK download</a>

	<p>Windows:</p> <p>Improved audio quality in some streaming scenarios by significantly reducing audio damage.</p> <p>Improved performance by 20%-30% in some scenarios.</p> <p>Supported setting the volume of the current process. You can now use <code>setApplicationPlayVolume</code> to set the volume of the volume mixer.</p> <p>macOS:</p> <p>Supported capturing system audio via <code>startSystemAudioLoopback</code>, i.e., the system loopback feature that is enabled on Windows. The feature allows the SDK to capture system audio so that anchors can stream local audio or video files to other users.</p> <p>Supported local preview for screen sharing. You can now display screen sharing preview in a small window.</p>		
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## January 2021

Update	Description	Release Date	Document
SDK 8.3 release	<p>All platforms:</p> <p>If you collect video data by yourself and use the audio module of the TRTC SDK at the same time, lip-sync errors may occur. This is because the SDK has its own timeline control logic. To solve this problem, we have provided the <code>generateCustomPTS</code> API. When a video image frame is captured, call this API and record the PTS (timestamp), and provide the timestamp when you call <code>sendCustomVideoData</code>.</p> <p>iOS &amp; Android &amp; macOS:</p>	2021-01-15	<a href="#">SDK download</a>

	<p>Optimized the audio module to ensure AEC and noise cancellation when you use <a href="#">enableCustomAudioCapture</a> to capture audio data and send it to the SDK for processing.</p> <p>iOS &amp; Android: If you need to add your own audio effects and audio processing logic in addition to those of the TRTC SDK, we recommend you use version 8.3, with which you can use <a href="#">setCapturedRawAudioFrameDelegateFormat</a> and other APIs to set what to include in the audio data callback, for example, the audio sample rate, the number of sound channels, and the number of samples, so that you can process audio data in your preferred format.</p> <p>Windows: Supported SOCKS5 proxy servers for domain names.</p>		
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## December 2020

Update	Description	Release Date	Document
SDK for Flutter release	<a href="#">TRTC SDK for Flutter</a> packages TRTC SDK for iOS and Android.	2020-12-30	<a href="#">Demo Quick Start (Flutter)</a>
SDK 8.2 release	<p>iOS &amp; Android: Supported the callback of the combination of locally captured audio and all played back audio, making local recording easier.</p> <p>Android: Supported using <code>TextureView</code> for local rendering through the <code>addVideoView(new TextureView(getApplicationContext()))</code> API in the video rendering component <code>TXCloudVideoView</code> . Supported video data in RGBA format for the custom rendering callback. Improved encoding quality for live streaming, delivering clearer videos.</p>	2020-12-23	<a href="#">SDK download</a>

	<p>macOS &amp; iOS: Supported calling <code>TRTCCloud.snapshotVideo</code> to take screenshots in the custom rendering mode.</p> <p>Windows: Supported taking screenshots of video captured by the local camera and played back remote videos. Supported using <code>addExcludedShareWindow</code> and <code>addIncludedShareWindow</code> to exclude or include windows you specify, increasing the flexibility of screen sharing. Optimized the AEC algorithm.</p>		
<p>SDK 8.1 release</p>	<p>All platforms: Added statistics on remote video lag to <code>onStatistics</code> . Supported using the volume adjusting API <code>setAudioPlayoutVolume</code> (100-150) for audio gain. Optimized the audio processing algorithm to deliver better audio quality when earphones are used.</p> <p>iOS &amp; Android: Added the <code>setLocalVideoProcessListener</code> API to better support the integration of third-party beauty filters.</p> <p>Android: Optimized the audio pre-processing algorithm, reducing the impact of the AEC, ANS, AGC algorithms on audio quality.</p> <p>Windows: Updated C# to the latest APIs.</p>	<p>2020-12-03</p>	<p><a href="#">SDK download</a></p>

## November 2020

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Update	Description	Release Date	Document
SDK 8.0 release	<p>All platforms:</p> <p>Added cross-platform C++ APIs. Supported string-type room IDs. For more information, please see <code>TRTCParams.strRoomId</code> .</p> <p>Added the device management class <code>TXDeviceManager</code> .</p> <p>Added the <code>TRTCCloud.switchRoom</code> API, which allows room switching with capturing uninterrupted.</p> <p>Added the <code>TRTCCloud.startRemoteView</code> API to start the rendering of remote videos.</p> <p>Added the <code>TRTCCloud.stopRemoteView</code> API to stop the rendering of remote videos.</p> <p>Added the <code>TRTCCloud.getDeviceManager</code> API to get the device management class.</p> <p>Added the <code>TRTCCloud.startLocalAudio</code> API to enable local audio capturing and upstream data transfer.</p> <p>Added the <code>TRTCCloud.setRemoteRenderParams</code> API to set the rendering parameters of remote videos.</p> <p>Added the <code>TRTCCloud.setLocalRenderParams</code> API to set the rendering parameters of the local video.</p> <p>Improved instant streaming performance after role switching in the manual subscription mode.</p> <p>Optimized the audio receiving logic, improving audio quality.</p> <p>Improved the reliability of <code>sendCustomCmdMsg</code> .</p> <p>Android:</p> <p>Optimized the logic for switching between software and hardware decoding.</p> <p>Windows:</p> <p>Improved audio quality and AEC for system loopback.</p> <p>Optimized the audio device selection logic to reduce cases of no audio.</p> <p>Reduced audio loss in double-talk scenarios.</p>	2020-11-13	<a href="#">SDK download</a>
Change of	On-Cloud MixTranscoding, which relies on the MCU	2020-11-	<a href="#">Billing of On-</a>



billing standards	cluster, became a billable service.	01	<a href="#">Cloud MixTranscoding</a>
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## October 2020

Update	Description	Release Date	Document
SDK 7.9 release	<p>All platforms:</p> <p>Supported custom encryption, allowing users to process encoded audio/video data using an exposed C API.</p> <p>Added audio lag information <code>audioTotalBlockTime</code> and <code>audioBlockRate</code> to <code>TRTCRemoteStatistics</code>.</p> <p>Improved audio playback smoothness when users switch between anchor and audience in the manual subscription mode.</p> <p>Improved audio/video call performance and audio smoothness in poor network conditions.</p> <p>Android:</p> <p>Optimized the in-ear monitoring effect for most Android devices, reducing in-ear monitoring latency to a more acceptable level.</p> <p>Reduced end-to-end delay in the music mode (specified in <code>startLocalAudio</code>).</p> <p>iOS:</p> <p>Shortened the startup time of the audio module, allowing quicker capturing and sending of the first audio frame.</p> <p>macOS:</p> <p>Supported filtering out selected windows from screen sharing. Users can exclude windows they do not want to share, better ensuring privacy.</p> <p>Windows:</p>	2020-10-27	<a href="#">SDK download</a>

	<p>Supported configuring the border color and width of the "Sharing" message box during screen sharing.</p> <p>Supported the high performance mode during desktop sharing.</p> <p>Optimized the AEC algorithm for system audio loopback ( <code>SystemLoopback</code> ).</p> <p>Allowed users to filter out certain windows from screen sharing to prevent the target window from being covered.</p>		
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## September 2020

Update	Description	Release Date	Document
SDK 7.8 release	<p><b>Android:</b></p> <p>Supported pushing a specified image when stream pushing pauses. For more information, please see <a href="#">TRTCCloud.setVideoMutelImage</a>.</p> <p>Optimized the audio routing policy to make sure that audio is always played back via earphones when earphones are connected.</p> <p>Allowed low-delay capturing and playback in certain systems, reducing call delay.</p> <p>Allowed using VODPlayer and TRTC at the same time with AEC enabled.</p> <p><b>iOS:</b></p> <p>Allowed using VODPlayer and TRTC at the same time with AEC enabled.</p> <p><b>iOS &amp; macOS:</b></p> <p>Supported pushing a specified image when stream pushing pauses. For more information, please see <a href="#">TRTCCloud.setVideoMutelImage</a>.</p> <p><b>macOS:</b></p> <p>Added the callback for system volume change.</p> <p><b>Windows:</b></p> <p>Supported specifying content for screen sharing across screens.</p>	2020-09-29	<a href="#">SDK download</a>

	<p>Supported filtering out specified windows from screen sharing to prevent the target window from being covered.</p> <p>Added the callback of system volume change.</p> <p>Made the SDK compatible with the virtual webcam e2eSoft VCam.</p> <p>Allowed calling <code>startLocalPreview</code> and <code>startCameraDeviceTest</code> at the same time.</p> <p>Allowed publishing screen sharing images via the primary stream and at the same time calling <code>startLocalPreview</code> to enable local preview.</p> <p>Fixed long audio delay caused by the playback buffer of the SDK.</p> <p>Optimized the audio enablement logic to prevent mic occupation in the playback-only mode.</p>		
<p>SDK 7.7 release</p>	<p>All platforms: Improved instant streaming performance of the substream (screen sharing images).</p> <p>iOS: Optimized the internal thread model to improve stability when 30 or more channels of audio/video are played back at the same time.</p> <p>iOS &amp; Android: Improved the performance of the audio module and reduced the capturing delay of the first audio frame. Improved volume and audio quality when VODPlayer and TRTC are used at the same time. Supported files in WAV format for audio effects and background music.</p> <p>Windows: Fixed high CPU usage when low-end cameras are used. Optimized the compatibility with multiple USB cameras and mics to make it easier to turn on such devices. Optimized the selection policy of cameras and mics to avoid audio/video capturing exceptions caused by the connection/disconnection of cameras and mics.</p>	<p>2020-09-08</p>	<p><a href="#">SDK download</a></p>

## August 202

Update	Description	Release	Document
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		Date	
<p>SDK 7.6 release</p>	<p>All platforms:</p> <p>Optimized the protocol policy of <code>enterRoom</code> to improve the speed and success rate of room entry.</p> <p>Fixed reduced performance and lag when a large number of audio channels are subscribed at the same time.</p> <p>Android:</p> <p>Added the <code>onCapturedRawAudioFrame</code> callback for <code>TRTCCloudListener</code> , and changed the names of a number of other callback APIs. The names used now are <code>onLocalProcessedAudioFrame</code> , <code>onRemoteUserAudioFrame</code> , and <code>onMixedPlayAudioFrame</code> .</p> <p>iOS:</p> <p>Added the <code>updateLocalView</code> and <code>updateRemoteView</code> APIs to improve user experience in adjusting the view rendering area in real time.</p> <p>Added the <code>onCapturedRawAudioFrame</code> callback for <code>TRTCCloudDelegate</code> , and changed the names of a number of other callback APIs. The names used now are <code>onLocalProcessedAudioFrame</code> , <code>onRemoteUserAudioFrame</code> , and <code>onMixedPlayAudioFrame</code> .</p> <p>Windows:</p> <p>Added the <code>updateLocalView</code> and <code>updateRemoteView</code> APIs to improve user experience in adjusting HWND rendering windows in real time.</p> <p>Added the <code>getCurrentMicDeviceMute</code> API to get whether the PC is muted.</p> <p>Added the <code>setCurrentMicDeviceMute</code> API to turn on global mute for the PC.</p> <p>macOS:</p>	<p>2020-08-21</p>	<p><a href="#">SDK download</a></p>

Added the `updateLocalView` and `updateRemoteView` APIs to improve user experience in adjusting the view rendering area in real time.

Added the `getCurrentMicDeviceMute` API to get whether the PC is muted.

Added the `setCurrentMicDeviceMute` API to turn on global mute for the PC.

Supported sharing specified area of a specified window.

## July 2020

Update	Description	Release Date	Document
SDK 7.5 release	<p>All platforms:</p> <p>Supported dual-stack IPv6 and IPv6-only.</p> <p>Allowed playing back streams in multiple rooms. This feature can be used for ultra-small classes.</p> <p>Allowed setting a background image for MCU On-Cloud MixTranscoding (for regulatory purposes, the image must be uploaded to the TRTC console first).</p> <p>Added two new modes for MCU On-Cloud MixTranscoding: <code>A + B =&gt; C</code> and <code>A + B =&gt; A</code>.</p> <p>Added the <code>jitterBufferDelay</code> field, which indicates the playback buffer time, to the real-time status callback API <code>onStatistics</code>.</p> <p>Reduced end-to-end delay for co-anchoring by 40% from that in version 7.4.</p> <p>Reduced in-ear monitoring delay on phones and allowed setting voice change and reverb effects for in-ear monitoring.</p> <p>Optimized the algorithm for evaluating network jitter at the player end to reduce playback delay.</p>	2020-07-31	<a href="#">SDK download</a>

	<p>Android:</p> <p>Reduced end-to-end delay for co-anchoring in TRTC SDK for Android.</p> <p>Reduced in-ear monitoring delay.</p> <p>Fixed the issue where playback view switching causes a black screen.</p> <p>iOS:</p> <p>Reduced in-ear monitoring delay.</p> <p>Improved the success rate of turning on mics.</p> <p>Windows:</p> <p>Supported username and password verification for SOCKS5 proxies.</p> <p>Fixed the issue of extremely low frame rate on some cameras when streams are pushed in the portrait mode.</p>		
Resource-level CAM	Supported CAM at the resource level. You can grant sub-accounts access to TRTC as needed.	2020-07-29	<a href="#">Access Management</a>
Alarm for remaining package minutes	Added an alarm switch in the console. After it is toggled on, notifications will be sent to you via SMS, the Message Center, or email when the remaining minutes in your package drop to the threshold.	2020-07-20	<a href="#">Package Management</a>
Change of billing standards	Added the bill-by-durationmode for on-cloud recording.	2020-07-01	<a href="#">Billing of on-cloud recording</a>

## June 2020

Update	Description	Release Date	Document
SDK 7.4 release	<p>All platforms:</p> <p>Fixed higher-than-expected audio call latency in the speech mode.</p> <p>Optimized the room entry policy to increase room entry success rate on all platforms.</p> <p>Supported setting the volume of in-ear monitoring.</p> <p>iOS:</p> <p>Supported AirPlay casting (in earlier versions, casting is not possible in the call volume mode).</p> <p>Windows:</p> <p>Optimized AEC to avoid echoes after system audio loopback ( <code>startSystemAudioLoopback</code> ) is enabled.</p> <p>Improved compatibility with camera devices.</p> <p>Improved compatibility with audio devices (mic and speaker).</p>	2020-06-24	N/A
SDK 7.3 release	<p>All platforms:</p> <p>Supported 128 Kbps stereo audio from sender to recipient, which can be set through the <code>setAudioQuality(TRTCAudioQualityMusic)</code> API.</p> <p>Supported the speech mode, which has a better ANS capability and is suitable for audio conferencing. It can be set through the <code>setAudioQuality(TRTCAudioQualitySpeech)</code> API.</p> <p>Supported playing multiple music tracks and looping background music. The former is designed for karaoke scenarios, where vocals and instruments need to be separated.</p>	2020-06-01	N/A

Added a new audio effect management API

`TXAudioEffectManager` while continuing to support the legacy API, allowing more flexible and diverse audio capabilities.

Added the `minVideoBitrate` option to the video encoding parameter `setVideoEncoderParam`. We recommend you set this option for live streaming users who have high requirements for image quality.

Supported calling `muteLocalVideo` before `startLocalPreview` to preview without pushing streams. You can also achieve this by calling `startLocalPreview` before `enterRoom`.

iOS:

Added a system-level screen sharing scheme, which allows the sharing of the entire system, similar to that in VooV Meeting. The integration is easy and can be completed in half a day.

Supported audio effects such as reverb for in-ear monitoring.

Android & Windows:

Supported transient noise reduction, which can be enabled through `setAudioQuality (TRTCAudioQualitySpeech)`.

Android:

Supported files packaged in assets for audio effects.

Windows:

Supported voice changing and other audio effects.

## May 2020



Update	Description	Release Date	Document
Change of billing standards	<p>Changed billable audio duration to the cumulative duration of users' stay in a room minus the duration of video to which the users subscribe.</p> <p>Note: If a user subscribes to multiple audio streams, the durations will not be added up for billing.</p> <p>If a user does not subscribe to any video streams, audio duration will be billed regardless of whether the user subscribes to audio streams.</p> <p>The calculation of billable video duration remains unchanged, which is the cumulative duration of video to which the users in a room subscribe.</p>	2020-05-01	<a href="#">Billing Overview</a>

## April 2020

Update	Description	Release Date	Document
Call quality monitoring APIs	<p>Added an API for querying rooms by <code>SDKAppID</code> . Up to 100 records can be returned at a time, and data in the last 5 days can be queried.</p> <p>Added an API for querying users and call quality metrics in a specified time period.</p> <p>Added an API for querying historical room and user count in a specified time period.</p> <p>Added an API for querying the number of rooms and number of calling users in the last 24 hours.</p> <p>Added an API for querying the room entry success rate, first-frame instant streaming rate, and audio/video lagging rate in the last 24 hours.</p>	2020-04-29	<a href="#">API Overview</a>

	Added an API for querying network conditions in the last 24 hours, including upstream/downstream packet loss.		
SDK 7.2 release	<p>Android:</p> <p>Supported screen recording for live streaming from mobile devices.</p> <p>Reduced performance loss during calls on low-end and mid-range Android phones, enhancing audio experience.</p> <p>iOS:</p> <p>Supported in-application screen sharing, which is suitable for in-application screen live streaming on mobile clients.</p> <p>Optimized the call audio quality on low-end iOS devices to improve the audio effect.</p> <p>iOS and Android:</p> <p>Optimized visual effect APIs such as filter and green screen keying.</p> <p>Windows:</p> <p>Optimized the <code>getCurrentCameraDevice</code> logic on Windows to return the first device as the default device when the camera is not used.</p>	2020-04-16	<a href="#">SDK download</a>
New usage statistics module in the console	Redesigned the usage statistics module, which shows in real time your billable minutes of audio as well as SD, HD, and FHD video. The data is refreshed once every 5 minutes.	2020-04-01	N/A

## March 2020

Update	Description	Release Date	Document
SDK 7.1 release	All platforms: Improved the usability of the preset stream mixing template.	2020-03-27	<a href="#">SDK download</a>

	<p>Fixed the issue of auto-relayed push upon room entry.</p> <p>Increased the success rate of stream mixing.</p> <p>Android:</p> <p>Fixed the issue where all audio processing values become 0 after frequent enabling and disabling of AGC in a room.</p> <p>Supported static build of projects using the C++ STL library.</p> <p>Enabled ANS and AGC by default for the call volume mode, improving audio quality.</p> <p>iOS:</p> <p>Fixed the issue where the preview image turns black for a moment if <code>startLocalPreview</code> is called before room entry.</p> <p>Fixed obvious echoes on some devices with iOS 13.3.</p> <p>Supported audio files with no file extensions for background music.</p> <p>macOS &amp; Windows:</p> <p>Supported sharing the screen via the primary stream.</p>		
General audio/video packages launch	Launched general audio/video packages, including fixed-time and custom ones. They can be used to deduct audio as well as SD, HD, and FHD duration. For 1 minute of audio, SD, HD, and FHD usage, 1, 2, 4, and 15 minutes are deducted from a general package respectively.	2020-03-11	N/A

## February 2020

Update	Description	Release Date	Document
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On-cloud recording optimization	Supported enabling/disabling on-cloud recording and configuring recording file formats and callback addresses for specific applications.	2020-02-14	N/A
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## January 2020

Update	Description	Release Date	Document
SDK 6.9 release	<p>All platforms:</p> <p>Added <code>streamId</code> to the <code>TRTCParams</code> parameter of <code>enterRoom</code>, which can be used to set the user's CDN stream ID, making it easier to bind to live streaming CDNs.</p> <p>Added <code>cloudRecordFileName</code> to <code>TRTCParams</code> of <code>enterRoom</code>, which can be used to set the recording file name for a live stream; improved the recording feature's tolerance of video interruption, enabling the remote recording of more complete video.</p> <p>Added the <code>TRTCAppSceneAudioCall</code> scenario, which you can specify when calling <code>enterRoom</code>. This scenario is optimized for audio calls.</p> <p>Added the <code>TRTCAppSceneVoiceChatRoom</code> scenario, which you can specify when calling <code>enterRoom</code>. This scenario is optimized for interactive audio chat rooms.</p> <p>Supported capturing 1080p video, allowing PC audience to watch clearer video published from phones.</p> <p>Added the <code>pauseAudioEffect</code> and <code>resumeAudioEffect</code> APIs, which can be used to pause and resume an audio effect.</p> <p>Added the <code>setBGMPublishVolume</code> and <code>setBGMPublishVolume</code> APIs, which can be used to set the local playback volume and publishing volume of background music respectively.</p> <p>Added the <code>setRemoteSubStreamViewRotation</code> API, which can be used to adjust the rotation of played back substream</p>	January 14, 2020	<a href="#">SDK download</a>

	<p>video.</p> <p>iOS &amp; Android: Added the <code>snapshotVideo()</code> API, which can be used to take screenshots of local or remote video.</p> <p>Android: Added a global volume type mode: <code>setSystemVolumeType (TRTCSysVolumeTypeVOIP)</code> , i.e., the call volume is always used, which is mainly used to solve the issue of capturing switch between the Bluetooth earphone and built-in mic.</p> <p>Supported Android 10.0.</p> <p>Windows: The SDK for C# supported onscreen rendering and custom rendering.</p> <p>The SDK for C# supported local audio recording.</p>		
<p>Call quality monitoring dashboard 2.0 release</p>	<p>Supported data query as soon as 3 seconds after upload from a native SDK.</p> <p>Retained data for 15 days.</p> <p>Supported rendering 6 users' data of 5 hours within 10 seconds at the web frontend.</p> <p>Provided multi-dimensional data and event flags from the sender's and recipient's perspective.</p> <p>Displayed end-to-end information on a single page for easy comparison.</p> <p>Used Tencent's proprietary quality evaluation system, which is more suitable for actual use cases.</p> <p>Improved user experience by making data more comprehensive and easier to understand and use.</p>	<p>2020-01-07</p>	<p>N/A</p>

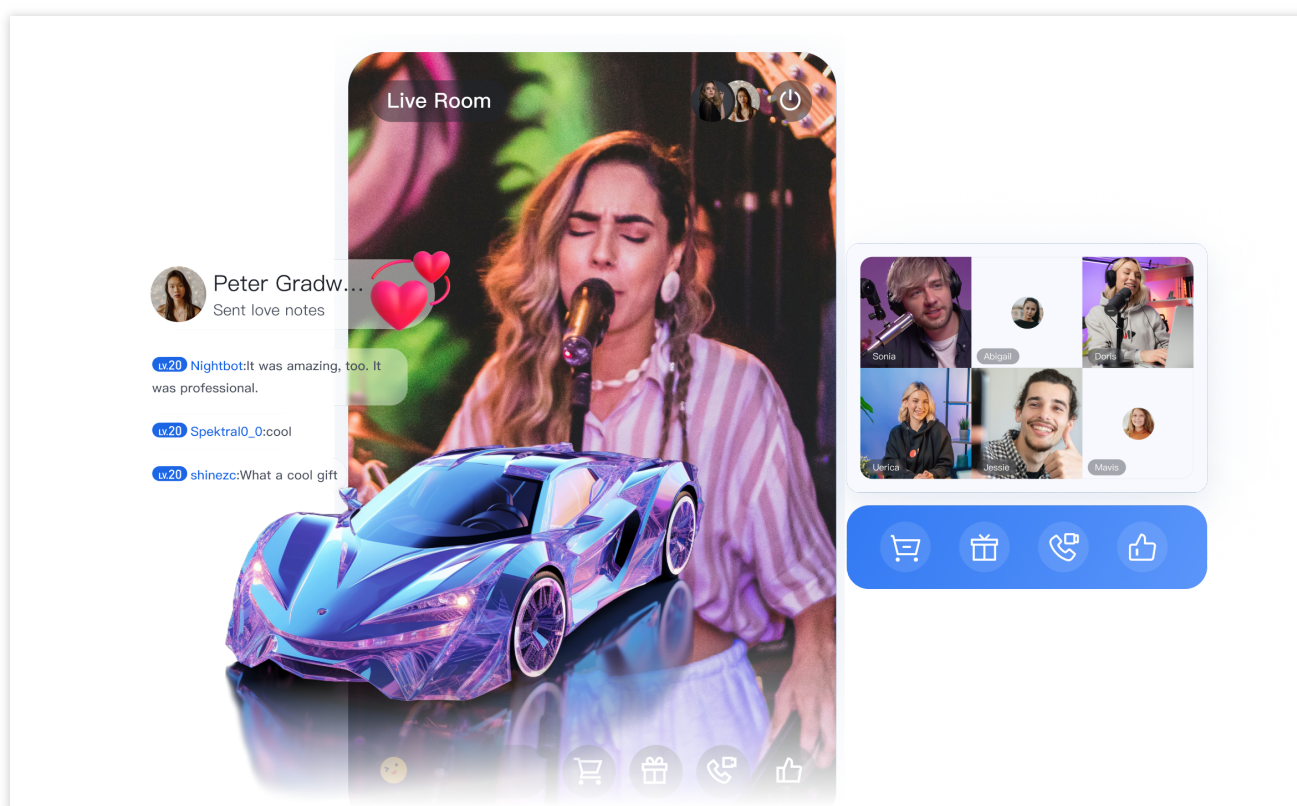


# TRTC Live (TUILiveKit) Product Launch Announcement

Last updated : 2024-04-26 15:00:05

Dear users,

**TRTC Live (TUILiveKit) is to be officially launched on April 22, 2024 Beijing Time (UTC+8).** This product is designed specifically for interactive live streaming scenarios such as social entertainment, online shopping, fitness guidance, and online classroom, aiming to bring a new interactive experience to your app.



## Product Highlights

**Out-of-the-Box:** Live provides both broadcaster and viewer UI kits with complete components and user interfaces closely tailored to live streaming business APIs, significantly reducing development complexity for customers. With just a few lines of code modification, interactive live streaming capabilities can be quickly launched, saving 90% of development time.

**Rich interactive live streaming features:** It supports multiple interactive features such as Chat and Emoji, Send gift, Like, and Multi-guest, while also supporting configuration capabilities such as audience management, audience

tag, face beautification, background music, and floating window, suitable for a variety of live streaming business scenarios.

**Ultra-low latency & High quality:** It delivers latency below 300 milliseconds, supports 2K and 4K, and adopts optimized networking and efficient encoding technologies to ensure a smoother, more immediate real-time interactive experience between viewers and broadcasters.

**Flexible UI customization:** It provides open-source components for standard live streaming UI, which can be used directly or flexibly modified based on specific business scenarios to meet requirements.



## Get Started for Free

TRTC Live will offer a free trial version (0 USD/month) upon launch, with a 14-day testing period that can be extended once, totaling 28 days. Additionally, 10,000 minutes of audio and video duration will be provided monthly. For detailed activation instructions, see [Activate the service \(TUILiveKit\)](#). For detailed billing and features for Live, see [TRTC Live Monthly Packages](#). For more information, see [Component introduction \(TUILiveKit\)](#).

## Integration Guide

**Integrated documentation:** See [Quick integration \(TUILiveKit\)](#) to quickly integrate live streaming capabilities into your application.



## Support and Help

**Technical support:** We provide professional [Technical support](#) to ensure your integration process is smooth.

**Communities and Forums:** Join our [Developer community](#) to exchange insights with other developers and grow together.

**FAQ:** [FAQs](#) answer page, to quickly resolve your doubts.

We look forward to your participation and starting a new chapter in interactive live streaming together!

**Best regards,**

**The Live (TUILiveKit) team**

# TRTC Conference Official Editions Launched

Last updated : 2024-07-03 17:01:13

**TRTC Conference (TUIRoomKit) will end its beta testing and officially launch the stable version on March 12, 2024.** We will offer multiple versions for your selection. Please refer to the following instructions for more details.

## Changes

1. We will be launching the official version of TRTC Conference with monthly subscription plans: Lite, Standard, and Pro. For specific details, please refer to [Features and Pricing of TRTC Conference Packages](#).
2. After the official launch of TRTC Conference, we will provide a trial version (**free of charge**) with the same features as the trial version offered during the beta testing period. **The trial period will be extended to 14 days.**
3. **Applications that have already accessed the beta version of Conference during the testing period can reapply to receive the trial version and continue using it.** Furthermore, you have the option to purchase the newly launched official version of Conference with monthly subscription plans at any time.
4. Each SDKAppID is eligible for two free trials, totaling 28 days of validity. Additionally, the total number of trial experiences for all SDKAppIDs under one account (UIN) is limited to 10 times.

## Features and Pricing of TRTC Conference Packages

To use Conference, you will need to purchase a monthly subscription plan. Please refer to the table for price and feature comparisons. For detailed billing information, please consult [TRTC Conference Monthly Packages](#).

Item		Free Trial	Lite	Standard	Pro
Price		As low as 0 USD for 14 days <a href="#">Free Trail</a>	299 USD/month <a href="#">Subscribe Now</a>	599 USD/month <a href="#">Subscribe Now</a>	899 USD/month <a href="#">Subscribe Now</a>
Package duration	Free minutes	10,000 minutes/month	10,000 minutes/month	10,000 minutes/month	10,000 minutes/month
	Package bonus minutes	-	100,000 minutes/month	300,000 minutes/month	450,000 minutes/month
	Pay-as-you-go upon exhaustion	Services become unavailable	✓	✓	✓

	(within the validity of the package)	after exhaustion			
Conference Features	Participants per room	100	20	50	200
	Active Rooms	10	20	100	200
	Quota Of Free Monthly Active User (MAU)	100/month	10,000/month	10,000/month	10,000/month
	Video Quality	HD, FHD, 2K, 4K	HD, FHD	HD, FHD	HD, FHD, 2K, 4K
	Complete UI	✓	✓	✓	✓
	Custom UI	✓	✓	✓	✓
	Floating Window	✓	✓	✓	✓
	Screen Sharing	✓	✓	✓	✓
	Member Management	✓	✓	✓	✓
	Room Management	✓	✓	✓	✓
	Free Speech Mode	✓	✓	✓	✓
	Audio mix by default	✓	✓	✓	✓
	On-stage Speech Mode	✓	-	✓	✓
	Microphone Management	✓	-	✓	✓
	Microphone Quantity	20	-	9	20
Chat in Conference	✓	-	✓	✓	

	AI noise suppression	✓	-	✓	✓
	Less stutter under poor network conditions	✓	-	✓	✓
	Multi-terminal login	✓	-	-	✓
TRTC Basic Features	On-Cloud Recording	✓	✓	✓	✓
	On-Cloud Mix-Transcoding	✓	✓	✓	✓
	Relay To CSS	✓	✓	✓	✓
Supported Platforms		iOS, Android, Web, Flutter, Electron, Windows	iOS, Android, Web, Flutter, Electron, Windows	iOS, Android, Web, Flutter, Electron, Windows	iOS, Android, Web, Flutter, Electron, Windows
Technical Support		-	Response time: 5 day/12 hour P1 - 2 hours P2 - 6 hours P3 - 12 hours	Response time: 5 day/12 hour P1 - 2 hours P2 - 6 hours P3 - 12 hours	Response time: 7 day/24 hour P1 - 1 hour P2 - 4 hours P3 - 8 hours
		-	Ticket and email support	Ticket and email support	Ticket and email support
		-	Telegram group	Telegram group	Telegram group

**Notes:**

1. Package duration: The duration of a package can be used to deduct your conference durations. If you use the trial edition, services will become unavailable for your application after you use up the package. If you use Lite, Standard or Pro, after you use up the package, your additional usage will be charged at pay-as-you-go rates.
2. Free minutes: Each Tencent Cloud account will get 10,000 free minutes per usage cycle (a usage cycle is one month) after it buys a TRTC Conference package. The free minutes can deduct usage of both TRTC Conference

features and TRTC basic features such as on-cloud recording and on-cloud mixtranscoding. To learn more, see [Free Minutes](#).

3. Package bonus minutes: Bonus minutes can deduct your conference durations. They are valid for one month and will expire at the end of each usage cycle.

4. TRTC basic features: In addition to TRTC Conference features, you can also use TRTC's basic features, which will incur additional fees. For the billing details, see [Billing of On-Cloud Recording](#) and [Billing of MixTranscoding and Relay to CDN](#).

## Activation and Usage

1. Refer to [Audio/Video Conference](#) to activate Conference and download the component.
2. Refer to [Integration \(TUIRoomKit\)](#) to quickly integrate multi-party audio and video capabilities into your application.

TRTC Team

March 12, 2024

# The commercial version of Conference is coming soon

Last updated : 2024-03-12 19:27:48

The commercial version of TRTC Conference (TUIRoomKit) is set to launch on March 12, 2024. Now you can contact us to get a free trial of the powerful features of the commercial SDK (version 2.0) .

## Highlights of the new version include

In the new version of the SDK, the product functionality has been greatly enhanced:

New features such as room reservation.

Comprehensive optimization of core functions such as room management, member management, conference control signaling management, and microphone management.

A brand new backend REST API for your use.

## Application method

You can contact us in the following two ways to apply for a trial and learn more about the product details:

**Send an email to: [info\\_rtc@tencent.com](mailto:info_rtc@tencent.com), please be sure to include the SDKAPPID in your email, so we can quickly respond and activate it for you.**(Recommended for a quick response).

[Join the Telegram group.](#)

### Note:

The default download on GitHub is the 2.0 version SDK. You need to contact us through the above methods to activate it for use.

# Terms and Conditions Applicable to \$9.9 Starter Package

Last updated : 2024-03-13 14:09:44

We are offering new users an amazing deal to initiate your project with low cost. You can get 50,000 minutes of audio and voice calling for \$9.9. [Purchase link](#).

## Description:

### Who Can Purchase

The \$9.9 Starter Package is available to new users who have never purchased any Tencent RTC products.

### Package Contents

The \$9.9 Starter Package includes:

50,000 minutes included.

one-on-one technical support.

Pay-as-you-go supported.

Applicable to all applications and products.

### Validity

The package is valid for one month from the date of purchase. For example, if user A purchased a package on November 15, 2023, the package would be valid from November 15, 2023 to December 14, 2023.

### How to Use

The package is immediately effective after purchase and can be used in all the applications without manual binding.

The 50,000 minutes can be used to deduct minutes generated by audio/video calls. Click [here](#) to check the deduction rule.

### Additional Benefits

You can also enjoy the free duration of 10,000 minutes per month.

### Renewal and Purchase Limit

This package is a one-time package and does not support renewal. A new user can purchase the package up to three times (main and sub-accounts combined).

## Pay-as-you-go Supported

During the validity period of a package, the pay-as-you-go privileges are automatically activated for your account. Any usage beyond the package will be charged on a daily postpaid basis, ensuring the continuous service. For the pay-as-you-go billing mode, please refer to our [documentation](#).

After the package expires, if you do not have any valid packages, your pay-as-you-go privileges will be deactivated. To continue using the service, we recommend subscribing to our official monthly plan with automatic renewal. Alternatively, you can choose to repurchase the \$9.9 Starter Package (each user can purchase the package up to three times).

## Frequently Asked Questions:

**Question:** Why did my order fail?

**Answer:** There are generally two possibilities: The first possibility is that you are not a new user and do not meet the purchase requirements; the second possibility is that you have a pending payment order. you will not be able to enjoy the discount price when you have an unpaid order. If the payment is not finished within 15 minutes, the order will automatically expire, and the discount also will be canceled. Please have a check in the [console](#) to see if there are any unpaid orders.

## Others:

1. Both main and sub-accounts can purchase this package. They can only purchase three packages in total. Agent account purchases are not supported.
2. Tencent RTC reserves the right to revoke resources from accounts engaged in illegal activities.
3. Tencent RTC reserves the right to the final interpretation of this activity.

If there is any problem, please [contact us](#) or [submit a ticket](#).



# Rules for the "First Subscription \$100 Discount" Promotion

Last updated : 2024-01-02 17:12:23

## Promotion Description:

This promotion is exclusively available for users who have not previously purchased any TRTC products. During the promotional period, eligible users can enjoy a \$100 discount on specified products. [Buy Link](#).

## Duration of The Promotion:

From 27th Nov., 2023 to 23:59:59(UTC+08:00) 31st Jan., 2024.

## Scope:

This promotion is applicable only to the purchase of Call and RTC Engine plans:

1-to-1 Call

Group Call

RTC Engine Standard

RTC Engine Pro

## Eligibility Criteria:

All users of Tencent RTC(including subaccounts) who purchase 1-to-1 Call、 Group Call、 RTC Engine Standard or RTC Engine Pro for the first time.

## FAQs:

1. Q: Why am I not able to enjoy the discounted price even though I am a first-time purchaser?

A: There could be a possibility that you have a Pending Payment. As long as there are unpaid orders, you will not be able to enjoy the discounted price. If payment is not made within 15 minutes, the order will automatically expire, and the discount will be released. Please check the [console](#) to see if there are any unpaid orders.

2. Q: What is the validity period for the promotion?

A: This discount is only valid for the first month, the original price will be restored when renewing.

## Others:

Tencent RTC reserves the right to repossess cloud resources in case of malicious bargain-hunting, long-idle resources, and illegal or inappropriate usage of resources.

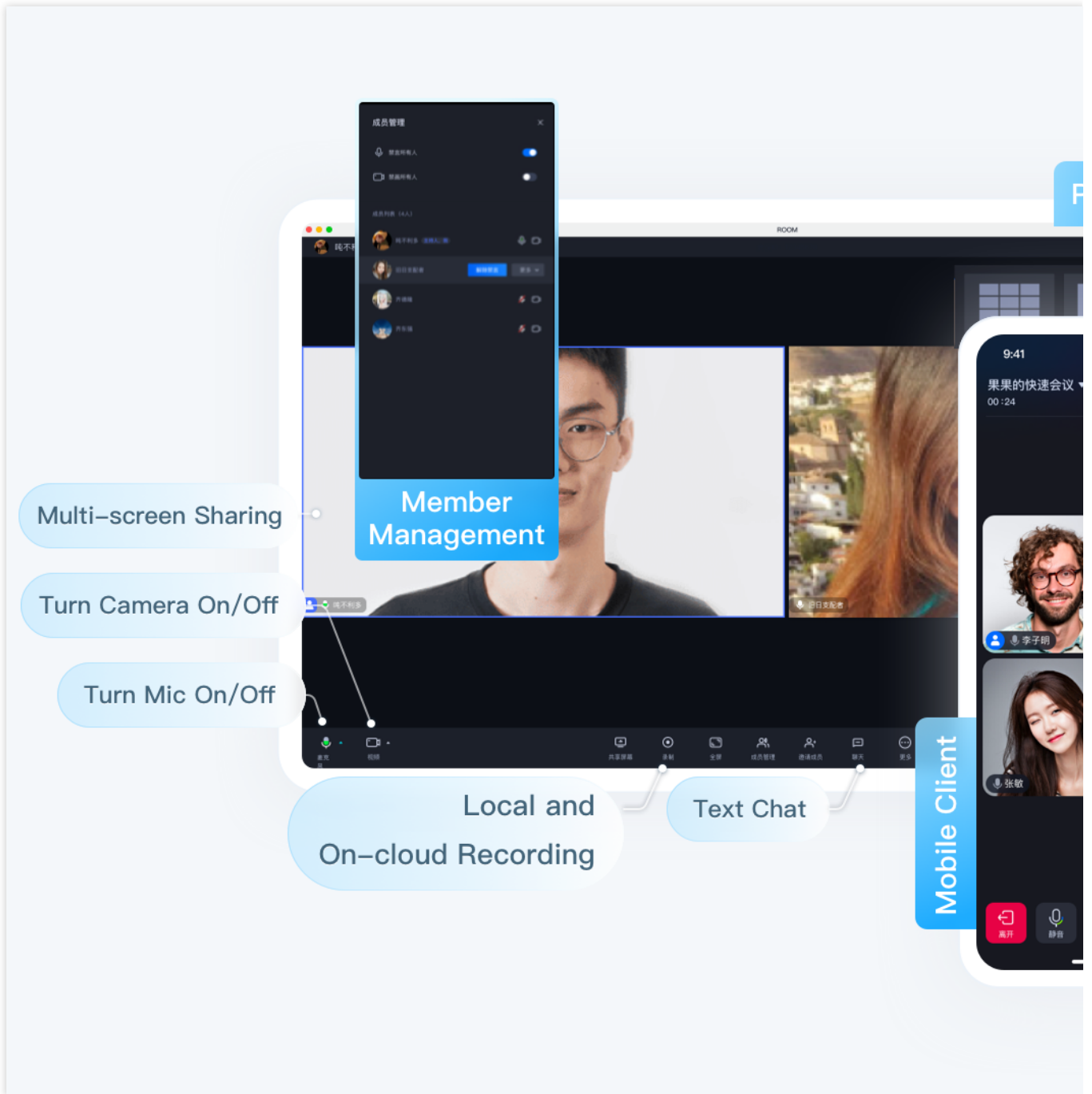
The rules and details of this offer are subject to change. Please refer to the offer page for the latest offer rules.

If you still have questions about this offer, please [submit a ticket](#) to get support from our team .

# Announcement on the Start of Beta Testing for Multi-person Audio and Video Conference

Last updated : 2023-12-20 10:37:06

TRTC Conference (TUIRoomKit) is a product designed for multi-person audio and video conversation scenes such as business meetings, online classrooms, and webinars. By integrating this product, you only need to write a few lines of code to add Multi-person Audio and Video Conversation function to your App, saving 90% development time and quickly launching your business. The Basic Function Display is shown in the following image:



## Internal Test Instructions

The product is currently in the Beta stage, **with the UI being open source and free to use, room management, microphone control, and other capabilities for a limited-time free use.** However, the consumption of Chat IM and Tencent Real-Time Communication TRTC during the usage process will still be charged normally. For details, please refer to [the Chat IM billing overview](#) and [TRTC billing overview](#). If there are any changes in the product's billing

method, features, and beta testing period, we will announce it in advance on the official website and notify you through site messages, text messages, and emails. Please stay tuned.

## Feature Introduction

TUIRoomKit provides UI for Standard Meetings, supporting Screen Sharing, Member Management, Microphone and Drawing Control, Chat Barrage, and other Conference Control Functions. It is compatible with Windows, Mac, Android, iOS, Web, and Electron platforms for seamless interconnectivity. Detailed Functions can be found in the Table Below:

Function Type		Function Description
UI View	Meeting Floating Window	Meeting Interface Floating
	Custom UI	Support custom adjustment of meeting UI layout
Room Management Capability	Create/Destroy/Join/Exit Room	Create, destroy, join, and exit the meeting room
	Single/All Mute Video/Mute Mic/Mute Chat	Mute video, mic, and chat for single or all users
	Kick Out of Room (Meeting)	Support kicking specified users out of the meeting room
	In-room Text Messages	Participants send text messages
	Custom Room Information	Customize room description, name, etc.
	Screen Sharing	Participants share computer screen in meeting
Audio and video call capability	Multi-person Audio/Video Call	<b>Support up to 300 participants, 50 people on mic, if you need to increase the limit, please <a href="#">submit a ticket</a> to contact us</b>
	Turn On/Off Camera	Participants turn on/off camera
	Turn On/Off Mic	Participants turn on/off mic
	Mic Volume Adjustment	Participants adjust mic volume
	AI-powered noise cancellation	Effectively filter background noise with AI capabilities, restore call quality

	Definition	Optional SD, HD, FHD, 2K
Multi-terminal login	Multi-terminal Login Meeting	Connect on any platform, automatically stop access requests from other terminals
	Same platform Multi-terminal login Conference	Support same platform (such as multiple iOS devices) login

## TUIRoomKit Download

# TRTC Call Official Editions Launched

Last updated : 2023-09-19 09:45:55

We have ended beta testing for TRTC Call on June 2 and are now offering official TRTC Call editions.

## Changes

1. The official editions of TRTC Call include 1-to-1 Call and Group Call. For details, see [Features and Pricing of TRTC Call Packages](#).
2. **A application that was subscribed to the TRTC Call trial edition during beta testing can continue to use the edition's features within its validity period.** You can also upgrade it to the official edition (1-to-1 Call or Group Call) whenever you want.
3. We will continue to offer the trial edition. The features will be the same, but the **validity period will become 7 days.**
4. Each application ( `SDKAppID` ) can try out TRTC Call twice, and each account (UIN) can try out TRTC Call 10 times in total. The trial edition used during beta testing will also be counted in.

## Features and Pricing of TRTC Call Packages

You need to buy a TRTC Call package first before you can use `TUICallKit` . For the features and prices of different package editions, see the table below. For more billing details, see [TRTC Call Monthly Packages](#).

### Note:

If you created Chat applications before and your Chat usage is **billed based on DAU**, the pricing below does not apply. Please refer to [Chat documentation](#) to learn **how to purchase and use TRTC Call**.

Item		Trial	1-to-1 Call	Group Call
Price		As low as 0 USD for 7 days	598 USD/month	1,298 USD/month
<a href="#">Package costs*</a> (Chat plan + Call package)		Any Chat plan (as low as 0 USD) + Call Trial (0 USD for 7 days)	Chat Standard (399 USD/month) + 1-to-1 Call (199 USD/month)	Chat Premium (699 USD/month) + Group Call (599 USD/month)
<a href="#">Package duration*</a>	<a href="#">Free minutes*</a>	10,000 minutes/month	10,000 minutes/month	10,000 minutes/month

	Package bonus minutes*	-	200,000 minutes/month	600,000 minutes/month
	Pay-as-you-go upon exhaustion (within the validity of the package)	Services become unavailable after exhaustion.	✓	✓
Chat usage	Peak MAU	Depends on the Chat plan edition.	10,000/month	10,000/month
TRTC Call features	Audio/Video calls	✓	✓	✓
	Complete UI	✓	✓	✓
	Call status display	✓	✓	✓
	Call notifications (If the application is not in the foreground, push notifications will be sent.)	✓	✓	✓
	Floating window (The call page can be displayed as a floating window.)	✓	✓	✓
	Custom ringtones	✓	✓	✓
	Make/Answer/Decline/Hang up a call	✓	✓	✓
	Video call switch to Audio call	✓	✓	✓
	1-to-1 call	✓	✓	✓
	Group call	✓	-	✓
	Invite to/Join ongoing calls	✓	-	✓
	Multi-platform call (A successful connection will automatically terminate requests from other platforms.)	✓	-	✓
Multi-device call	✓	-	✓	



	(A user can be logged in to multiple devices of the same platform, for example, multiple iOS devices, and join a call.)			
	AI noise suppression (Removes background noises with the help of AI.)	✓	-	✓
	Less stutter under poor network conditions (Reduces stutter rate and loading time under poor network conditions.)	✓	-	✓
TRTC basic features*	On-cloud recording	✓	✓	✓
	On-cloud mixtranscoding	✓	✓	✓
	Relay to CSS	✓	✓	✓
Chat features	See <a href="#">Chat Basic Services</a> .	See <a href="#">Chat Standard Edition</a> .	See <a href="#">Chat Premium Edition</a> .	
Supported platforms	iOS, Android, web, Flutter	iOS, Android, web, Flutter	iOS, Android, web, Flutter	
Technical support	-	-	Response time: 5 day/12 hour P1 - 2 hours P2 - 6 hours P3 - 12 hours	Response time: 7 day/24 hour P1 - 1 hour P2 - 4 hours P3 - 8 hours
	-	-	Ticket and email support	Ticket and email support
	-	-	Telegram group	Telegram group

## Note

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1. Package costs: The underlying capabilities of TRTC Call rely on the Chat service. Therefore, a TRTC Call monthly package is purchased together with a [Chat plan](#) by default, and the package costs include the cost of a TRTC Call monthly package and that of a Chat plan. You can choose any edition for the Chat plan (the Developer edition is free).

2. Package duration: The duration of a package can be used to deduct your call durations. If you use the trial edition, services will become unavailable for your application after you use up the package. If you use TRTC 1-to-1 Call or TRTC Group Call, after you use up the package, your additional usage will be charged at pay-as-you-go rates.
3. Free minutes: Each Tencent Cloud account will get 10,000 free minutes per usage cycle (a usage cycle is one month) after it buys a TRTC Call package. The free minutes can deduct usage of both TRTC Call features and TRTC basic features such as on-cloud recording and on-cloud mixtranscoding. To learn more, see [Free Minutes](#).
4. Package bonus minutes: Bonus minutes can deduct your call durations. They are valid for one month and will expire at the end of each usage cycle.
5. TRTC basic features: In addition to TRTC Call features, you can also use TRTC's basic features, which will incur additional fees. For the billing details, see [Billing of On-Cloud Recording](#) and [Billing of MixTranscoding and Relay to CDN](#).

To learn more about the packages, see [TRTC Call Monthly Packages](#). For how to activate TRTC Call and download the component, see [Audio/Video Call](#). For how to integrate TRTC Call capabilities into your application, see [Integration \(TUICallKit\)](#).

TRTC Team

June 2, 2023

# License Required for Video Playback in New Version of LiteAV SDK

Last updated : 2023-09-19 10:03:15

We have released version 10.1 of the LiteAV SDK for mobile devices (Android, iOS, and Flutter). The new version uses the same playback engine that powers Tencent Video and comes with optimized playback features. For details, see [What's New](#).

In this new version, you will need a license to use the **video playback** module.

You can **apply for a license for free to use the live and on-demand playback capabilities of the new SDK**.

For detailed directions, see [Free License](#). You don't need a license if you don't use the video playback features or if you haven't updated to v10.1 or later versions.

## Note:

**If your app already has a live streaming license or UGSV license, you can continue to use the video playback features after updating to v10.1.** You can view your license information in the [CSS console](#) or the [VOD console](#).

## Free License

Since v10.1, you need a license to use the **video playback** module of the SDK. Follow the steps below to apply for a license for free:

1. Log in to the [TRTC console](#). If you don't have an account yet, sign up first.
2. Select **Relevant Cloud Services** on the left sidebar. In the **Licenses** area, click **Create official license**, enter the information as required, and click **Confirm**.

## What's New

The new LiteAV SDK is powered by Tencent's proprietary playback engine, which has been improved continuously over the years and has been tested by numerous services. The new SDK increases performance by 30-50% over built-in players, is easy to integrate, and has been optimized for business customers, with excellent bandwidth control to help you boost your revenue. It also features Top Speed Codec transcoding, content protection, end-to-end data monitoring, and scenario-specific low-code integration, making it the first of its kind in the industry and a leading-edge, enterprise-grade video playback solution.

New	Description
Tencent	For the first time, Tencent offers the playback capabilities of its Tencent Video product to the

Video's playback engine	public, giving the LiteAV SDK new advantages such as superior audio/video experience, accurate seeking, offline playback, as well as smoother, more stable playback and better compatibility.
New formats	The new SDK adds support for formats including QUIC, AV1, and H.266, meeting needs in more scenarios and helping you reduce costs by cutting bandwidth usage by 20-55% from the existing H.264 and H.265 formats.
New content protection solution	In addition to proprietary protocol encryption, local encryption, and hotlink protection, the new SDK introduces a DRM encryption scheme based on well-established DRM technologies, offering full protection for your content.
Video quality enhancement	The new SDK adds support for HDR10 video playback. It also offers Top Speed Codec transcoding solutions to help you reduce bandwidth usage without compromising playback experience.
Scenario-specific low-code integration	We offer code for application scenarios such as short videos and video feeds, as well as capabilities including thumbnail generation, dynamic watermarking, and playlist playback to help you quickly build your apps at low costs.

# TRTC to Offer Monthly Packages

Last updated : 2024-01-18 11:21:20

To provide you with better services, **starting from March 7, 2023**, TRTC will offer new **monthly subscription plans** (Free, Standard, and Pro packages). You can use the packages to unlock different features for different TRTC applications. For details, see [Package Features](#).

You can purchase different packages for your TRTC applications based on your needs.

The Standard and Pro packages come with bonus minutes that can be used to deduct audio/video call usage. **Please note that even after you buy packages, you may still incur pay-as-you-go fees** if the packages are exhausted or if they cannot deduct the type of usage that occurred.

## Changes

**Newly created applications will be subscribed to your free package, which enables basic features including audio/video calls, on-cloud recording, and relay to CSS.**

The monthly free package will be renewed automatically when it expires, and your TRTC account will be offered 10,000 free minutes every month. Subscribing to a free package will not incur any fees.

If your monthly usage exceeds 10,000 minutes, **TRTC services will be suspended** for your account. You can upgrade to a Standard or Pro package to continue to use TRTC. You can also [submit a ticket](#) to get support from our team.

### Note:

If your account (UIN) is created before March 07, 2023, pay-as-you-go is enabled by default for all your TRTC applications (SDKAppID). However, some features are only available in TRTC **Standard** and **Pro**, and to use those features, you need to buy a Standard or Pro package.

**Starting from March 07, 2023, you will need to buy packages to use the following services.**

We have ended beta testing for features including RTMP publishing, 3D spatial audio, and 2K/4K video quality.

**Starting from March 07, 2023**, you will need to purchase different TRTC packages in order to use the features. For details about the features of different package editions, see [Package Features](#).

**Each application can be subscribed to only one package edition at a time.**

For example, if the application "Application test\_trtc" is already using a TRTC Standard package, you cannot upgrade it to TRTC Pro before the package expires. If you do want to change the package edition an application is subscribed to, please [submit a ticket](#).

## Package Features

Category	Item	Free (default edition)	Standard	Pro
Price		0 USD/month	499 USD/month	1,499 USD/month
Minutes	Free minutes (deducts audio/video call and on-cloud recording durations)	10,000 minutes/month	10,000 minutes/month	10,000 minutes/month
	Bonus minutes (deducts audio/video call durations)	-	500,000 minutes/month	1,500,000 minutes/month
	Pay-as-you-go upon exhaustion (before the package expires)	Service suspension upon exhaustion	✓	✓
Basic TRTC services	Audio/Video call	✓	✓	✓
	On-cloud recording	✓	✓	✓
	On-Cloud MixTranscoding	-	✓	✓
	Relay to CSS	✓	✓	✓
Value-added TRTC services	Relay to third-party CDNs	-	✓	✓
	AI noise suppression	-	✓	✓
	Less stutter under poor network conditions	-	✓	✓
	3D spatial audio	-	-	✓

	<b>Scaled video coding</b>	-	-	✓
	<b>Region of interest coding</b>	-	-	✓
	<b>2K/4K video quality</b>	-	-	✓
Supported SDKs/Platforms		iOS/macOS Android Windows Web Electron Flutter React Native	iOS/macOS Android Windows Web Electron Flutter React Native	iOS/macOS Android Windows Web Electron Flutter React Native
Technical support		-	Response time: 5 day/12 hour P1 - 2 hours P2 - 6 hours P3 - 12 hours	Response time: 7 day/24 hour P1 - 1 hour P2 - 4 hours P3 - 8 hours
		-	Ticket and email support	Ticket and email support
		-	Telegram group	Telegram group

**Note:**

You get bonus minutes for purchasing a TRTC package. The minutes are valid for one month and can be used to deduct the audio/video call usage of your account. For details about pay-as-you-go upon exhaustion, see [Billing of TRTC Services](#).

TRTC Team

January 10, 2023