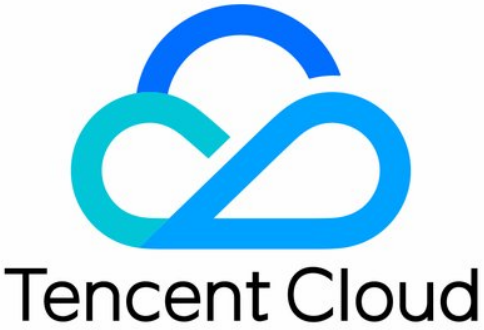
rtcube

Product Introduction



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Product Introduction
Overview

Last updated：2025-03-17 15:10:51

The RT-Cube Terminal SDK (Tencent Cloud RT-Cube) is a newly upgraded family of audio and video communication terminal products by Tencent Cloud. It integrates core audio and video capabilities such as live streaming, video playback, real-time audio and video, and Chat, providing users with an integrated SDK that supports multi-terminal access including mobile, PC, Web, and mini-program. Based on popular audio and video scenarios today, it offers quick integration solutions for SDKs, allowing users to customize the integration according to business needs.

Introduction to Audio and Video Terminal SDK Product Family

The audio and video terminal SDK (Tencent Cloud RT-Cube) product family is divided into basic SDKs and low-code components with UI.

- Basic SDK **only provides basic terminal capabilities**, including five sub-product SDKs: Mobile Live Video Broadcasting SDK (MLVB SDK), User Generated Short Video SDK (UGSV SDK), Player SDK, Full-Feature Version SDK, and Tencent Effect SDK.
- Low-code components with UI **provide a complete solution including backend service and terminal SDK**, supporting rapid integration of UI resources, including Tencent RTC Call (TRTC Call) and Tencent RTC Conference (TRTC Conference).

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Audio and Video Terminal SDK Product Family Feature Introduction

Basic SDK Feature Introduction

The correspondence between features and SDKs is shown in the following table . **You can choose the corresponding SDK according to the needs of your product. The full feature version of SDK** includes all the functions of live streaming SDK, short video SDK, player SDK and Tencent Real-Time Communication (TRTC) SDK , which can solve the dependency library conflict caused by the simultaneous use of multiple SDKs.

Feature / SDK	The Full Feature Version of SDK	MLVB SDK	Short Video SDK	Player SDK	Tencent Effect SDK
Streamers go live	✓	✓	–	–	–
Streamer and audience mic connection / Streamer cross-room PK	✓	✓	–	–	–
Video recording editing / Video	✓	–	✓	–	–

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uploading and publishing					
Live stream playback	✓	✓	–	✓	–
VOD playback	✓	–	✓	✓	–
Tencent Real-Time Communication	✓	–	–	–	–
Beauty effects	–	–	–	–	✓

Introduction to the Low Code Component Feature With UI

Component / Feature Description	Feature Description	Package Feature Support
TRTC Call SDK	The TRTC Call SDK (TUICallKit) is a product deeply customized for call scenarios. It provides features commonly seen in video call scenarios, such as one-on-one audio and video calls, group audio and video calls, mid-call third-party calling, AI call noise reduction, and call lag optimization. It offers a fast integration solution with the same UI as WeChat video chat. Integration and launch can be completed in up to three steps in as fast as one day.	Package Feature Description
TRTC Conference	The TRTC Conference SDK (TUIRoomKit) is a low-code component with UI designed for multi-person audio-video session scenarios such as enterprise meetings, online classes, and Online Salons. By integrating this component, you can add multi-person audio-video session features to your App in just three steps and launch your business within one day.	Package Feature Description

Full-Featured Integrated Solution

If you want to integrate a full-featured and closed-loop audio and video and communication capability for your App, you can quickly achieve your goal by referring to Tencent Cloud Audio and Video Terminal SDK Demo .

Tencent Cloud Audio and Video Terminal SDK Demo comprehensively utilizes the basic product capabilities of Tencent Cloud CSS, MLVB SDK, UGSV SDK, and TRTC, providing a series of common audio and video and communication-related features including **anchor**

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starts live streaming, streamer and audience mic connection / streamer cross-room PK, video recording and editing / video upload and publishing, live viewing, VOD playback, audio and video call. All features follow the modular stacking principle in design, and you can customize the combination according to the needs of your product. You can build a prototype of an audio and video communication product in as fast as **1 day**.

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Subproduct Description
Tencent RTC Conference

Last updated：2025-03-17 15:11:14

TRTC Conference is one of the sub-products of audio and video terminal SDK (Tencent Cloud Video Cube). It is customized for multi-person audio and video session scenarios such as corporate training, online meetings, and webinars. It provides conference control features such as room management, member management, and screen sharing. It offers a UI quick integration solution that can be integrated and launched within three steps in one day, making it easy to build a dedicated audio and video room. For more product details, see TRTC Conference.

Product Structure

Package Feature Description

The features of the multi-person audio-video room SDK package include **IM feature** and **exclusive features for multi-person audio-video**. For detailed feature points supported by each version of the package, see Feature Description of Multi-person Audio-video Room SDK.

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Supported Platforms

The specific platform support and development environment requirements of the multi-person audio-video room SDK are shown in the following table:

Platform	Development Environment Requirements
iOS	• Support for iPhones or iPads running iOS 12.0 and above • The project has been configured with a valid developer signature
Android	• Minimum compatibility with Android 4.4 (SDK API Level 19). It is recommended to use Android 5.0 (SDK API Level 21) and later versions. • Android Studio 3.5 or later (Gradle 3.5.4 or later) • Android 4.4 and above mobile devices
Windows	• Visual Studio 2015 and above integrated development environment • QT development library version 5.9.1 and above • QT development plugin under VS Qt Visual Studio Tools 2.2.0 and above • Minimum supported system: Windows 8.1 • Ensure that your integrated development environment can develop normally
Web	• It is recommended to use desktop Chrome 56+. For detailed development environment requirements, see Supported Platforms.
Electron	• Support Windows 7 and later versions, Mac OS 10.10 and later versions • Support Electron version 4.0.0 and later. It is recommended to use the latest Electron SDK.

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Audio and Video Call SDK

Last updated：2025-03-17 15:11:32

Tencent Cloud RT-Cube Audio/Video Call SDK is one of the sub-product SDKs of the audio and video terminal SDK (Tencent Cloud RT-Cube). Based on the audio and video call scenario, it provides an exclusive UI-contained quick integration solution. It can be quickly integrated and launched in just three steps, easily implementing scenarios such as 1-to-1 video chat, multi-person video call, and chat applications, and building exclusive audio and video call applications. For more details about the Audio/Video Call SDK, see Audio/Video Call SDK.

Product Structure

Package Feature Description

The features of the Audio/Video Call SDK package include **IM feature** and **exclusive audio and video call features**. For detailed feature points supported by each version of the package, see Audio/Video Call SDK Feature Description.

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Mobile Live Video Broadcasting SDK

Last updated：2025-03-17 15:12:35

The MLVB SDK is an integrated product tailored for mobile live streaming scenarios by the audio and video terminal SDK (Tencent Cloud Video Cube). It supports live push/pull streams, interactive co-anchoring between anchors and audiences, cross-room PK for anchors, and other capabilities, providing users with high-quality live streaming services and quickly meeting the needs of mobile live streaming. For more details about the MLVB SDK, see MLVB SDK.

Product Architecture

MLVB SDK Feature List

For detailed features of MLVB SDK, see MLVB SDK Feature Description.

Solutions and Architectures

Quick Integration of Live Stream Features

Use the streaming feature of the MLVB SDK in conjunction with LVB and LEB to quickly implement live streaming in existing apps, achieving better streaming quality and faster streaming speed. It also supports RTMP, FLV, HLS protocols and WebRTC protocol for live

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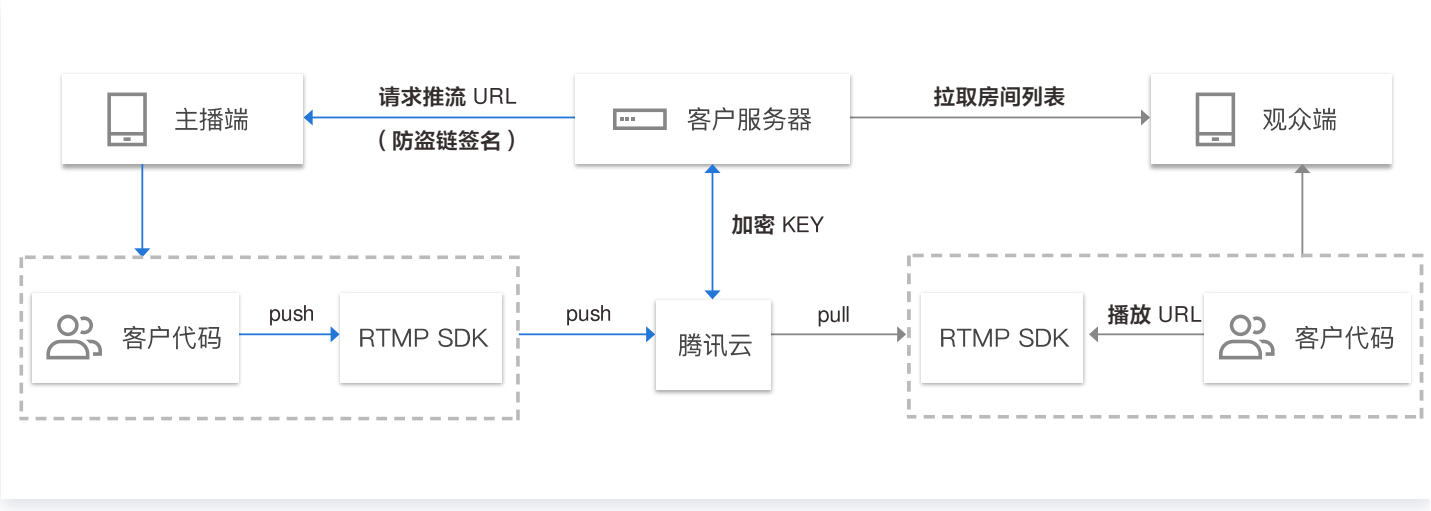
streaming playback, enhancing the viewing experience of current live streams, reducing the global stutter rate, and being applicable to various live streaming scenarios on multiple platforms.
After activating the CSS service, you only need to understand the generation rules of Tencent Cloud CSS addresses to customize your own streaming and playback addresses. Combined with the **quick integration solution** provided by Tencent Cloud Video Cube Live SDK, a pair of streaming and playback URLs + Live SDK can quickly add live streaming capabilities to your App.



Integrated Integration Solution

If you want to integrate a complete and closed-loop live streaming capability for your App, you can quickly achieve your goal by referring to small live streaming source code collection.
Mini live streaming integrates several basic services such as Tencent Cloud Video Live（LVB）, Video on Demand（VOD）, Chat（IM）, and Cloud Object Storage（COS）, providing a series of common live streaming-related features including text interaction, barrage message, hearts and likes, beauty whitening, skin animation, mic-connectio interaction, identity verification, etc. All features follow the modular stacking principle in design. You can customize the combination according to the needs of your product and build a prototype of a live streaming product within a day.

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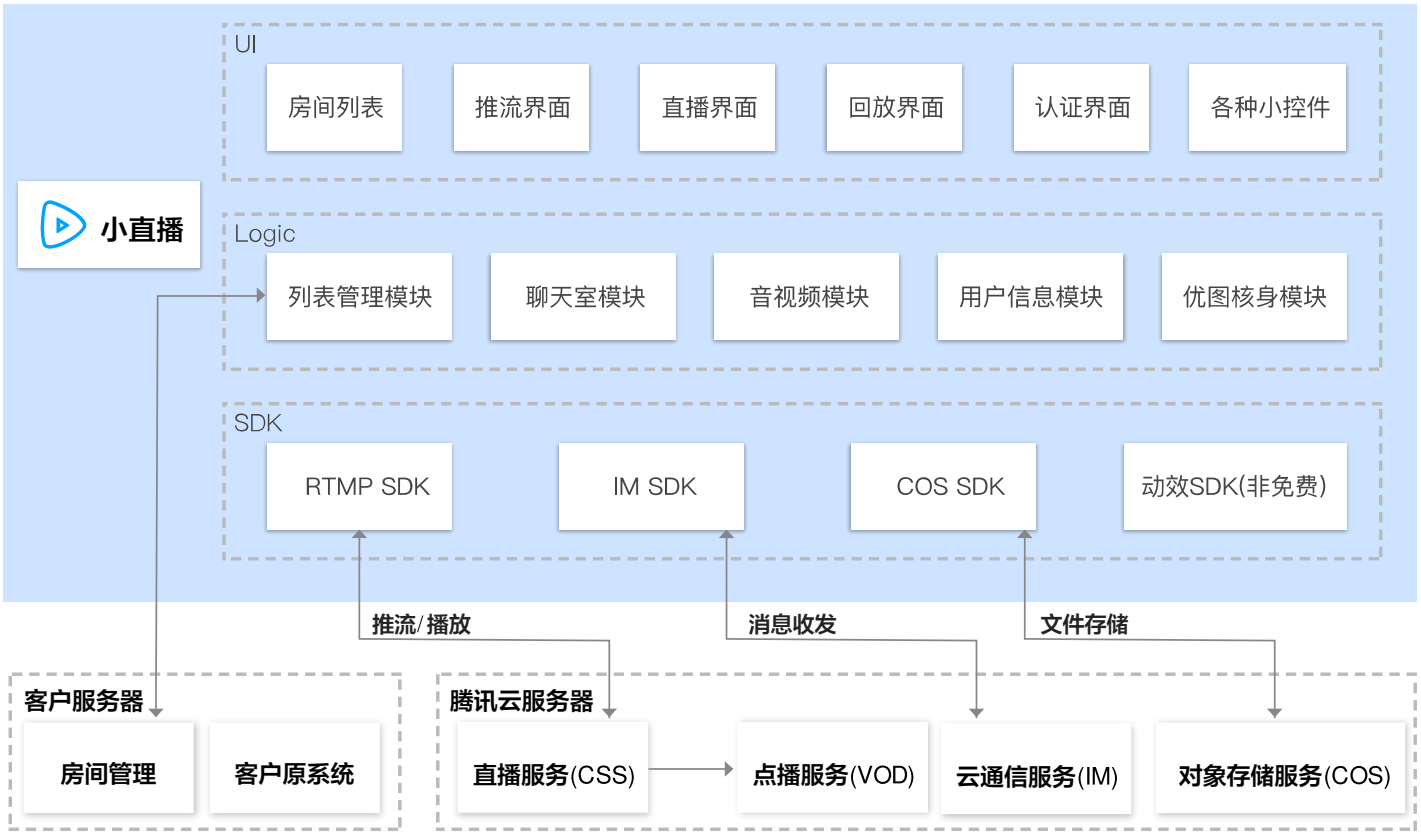

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Short Video SDK

Last updated：2025-03-17 15:12:53

Tencent Cloud Video Cube Short Video SDK is one of the sub-product SDKs of the audio and video terminal SDK (Tencent Cloud Video Cube). Based on Tencent Cloud's powerful VOD capabilities in upload, storage, transcoding, and delivery, it provides a client SDK that integrates functions such as capturing, editing, splicing, special effect creating, sharing, and playback of audio and video clips. It also integrates Tencent's IM, video content recognition and other technologies to help users focus on their core business and quickly and easily implement mobile short video applications. For more details about the Short Video SDK, see Short Video SDK.

Product Architecture

Short Video SDK Capability List

To use the short video SDK, you need to purchase a short video License. The short video License comes in two editions: simplified edition and basic version. For details about the supported features of different editions, please refer to Short Video SDK Features.

Advantages

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Complete Features

Provide all the features required by mainstream short video apps in the market, including capabilities such as video capture, editing, concatenation, special effects, beauty effect, filter, green screen keying, dynamic widgets, publishing and playback. For complete features, see Product Features.

Easy-To-Use Integration

Provide demo source code with complete capabilities, including one-stop access service from Cloud Video on Demand (VOD) configuration to SDK feature usage. Simply change the parameters to quickly create your own "TikTok" or "Kuaishou". For details, see Demo Experience.

Compliance Review

Based on Tencent Cloud Video on Demand (VOD), it provides video compliance content auditing capabilities and feeds back video auditing results to facilitate video compliance management. For more details, see Media Auditing Service (MAS).

Cloud-Based Collaboration

Integrate Tencent Video on Demand to provide one-stop cloud access services from work upload, storage, fast transcoding, to video porn detection and distribution, ensuring that users' works are watched and shared as soon as possible.

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Tencent Effect SDK

Last updated：2025-03-17 15:13:06

Tencent Effect SDK (Tencent Effect) is one of the sub-product SDKs of Tencent Cloud RT-Cube (Tencent Cloud RT-Cube), providing beauty effect features. Based on Youtu's accurate AI capability and Tiantian Pitu's rich real-time effect processing, it provides extensive product capabilities for various video processing scenarios. Tencent Effect SDK supports integration with live streaming SDK, short video SDK, Tencent RTC Call and other audio and video terminal products, which is highly efficient and convenient, with particularly obvious advantages. For more details about Tencent Effect SDK, see Tencent Effect SDK.

Product Architecture

Tencent Effect SDK Feature List

Tencent Effect SDK provides multi-platform technical support, including **mobile terminal/pc** and **web**. For details, see Mobile Terminal/PC Feature Description and Web Feature Description.

Core Advantages

Rich Feature Modules

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In addition to covering basic beauty and makeup, filter sticker features in the market, it also provides accurate portrait segmentation (virtual background) technology, enabling custom background segmentation and background blur capabilities in images or videos.

The Beauty Effect Function Is Powerful

It can beautify the face in all aspects and provides 7 types of face shape adjustments (3 types of slimming face, face shape, V-face, narrow face, short face), supporting users to adjust to a satisfactory face shape from multiple dimensions without blind spots and achieving excellent user experience.

Stunning Filter Effects

It has excellent filter features in the market, 3D capabilities at the industry-leading level, and dynamic effect stickers that stably follow facial keypoints, easily achieving an immersive sticker interactive experience.

Powerful Material Creation Tools

It has a vast and excellent material library and rich AI feature configurations: 3D capabilities, process control, dynamic effect import, etc., making it easy to create personalized special effects.

Convenient to Use

Integration with the live streaming SDK, short video SDK, and TRTC Call under the Tencent Cloud RT-Cube brand is efficient and convenient, quickly implementing features in the simplest way. For detailed operations, see Demo.

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Player SDK

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Tencent Cloud Video Cube Player SDK is one of the sub-product SDKs of Tencent Cloud Video Cube terminal SDKs. Based on Tencent Cloud's powerful backend capability and AI technology, it provides a powerful playback carrier with capabilities for Video on Demand and live streaming. When used in combination with Tencent Cloud Video on Demand or Cloud Streaming Services, it enables users to quickly experience smooth and stable playback performance as well as more features such as advertising placement and data monitoring. It fully covers various application scenarios to meet diverse customer needs, allowing customers to easily focus on business development itself and enjoy the new experience of Top Speed Codec playback. For more details about Player SDK documentation, see Player SDK.

Product Architecture

To obtain better product features and playback performance experience, it is recommended to use it in combination with Tencent VOD and CSS.

Core Advantages

High Performance

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Player SDK fully supports features such as instant first frame broadcasting, seamless resolution switching, adaptive bitrate and stutter reduction. At the same time, relying on the video acceleration capability provided by Tencent Cloud's massive acceleration nodes, it brings an extremely fast video playback experience with millisecond-level latency.

Low Costs

The player SDK supports the new H.265 video decoding method, improving compression transcoding efficiency and reducing playback latency, allowing users to watch higher-definition videos with less bandwidth; it also provides a comprehensive player Demo, reducing the integration threshold and lowering development costs for enterprises.

Video Security

Player SDK provides various encryption solutions such as hotlink protection, URL authentication, HLS encryption, proprietary protocol encryption, and local encryption to comprehensively ensure media security and meet security requirements in different scenarios.

Cloud As a Bundle

Player SDK is loosely coupled with native adaptation to Tencent Cloud Audio/Video services, enabling easy use of PAAS resources such as VOD and CSS to build integrated cloud capabilities.

Data Service

Player SDK supports full-link video playback quality monitoring, including multi-dimensional data indicators such as playback performance, user behavior, and file characteristics, facilitating efficient business operations.

Diversified Playback Capability

Player SDK provides various features such as progress bar dotting, thumbnails, speed adjustment, bullet screen, and floating window to meet diverse business scenarios and facilitate the construction of business ecosystem.

Player SDK Feature List

Player SDK provides video playback capabilities for live stream and on-demand scenarios, supporting platforms such as Web/H5, iOS, Android, and Flutter. For details of supported features, see Player SDK Feature Description.

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Basic Concepts

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This document aims to introduce the basic concepts you may encounter during the use of the Audio and Video Terminal SDK (Tencent Cloud RT-Cube) product.

Audio and Video Terminal SDK (Tencent Cloud RT-Cube)

Application

The Audio and Video Terminal SDK (Tencent Cloud Video Cube) manages your projects (Apps) in the form of **Applications**. You can manage different projects (Apps) by creating different applications. You can distinguish different applications by filling in different APP Names and Bundle IDs/Package Names when creating a License. One application can contain multiple feature modules, representing different business capabilities in your project (App).

SDK

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) is an integrated audio and video communication terminal product, including six sub-product SDKs, namely: **Mobile Live Video Broadcasting SDK (MLVB SDK), User Generated Short Video SDK (UGSV SDK), Tencent RTC Call (TRTC Call) SDK, Player SDK, Tencent Effect SDK, and Full-Feature SDK (i.e., Audio and Video Terminal SDK)**. For details, see SDK Download.

Feature Module

Feature modules represent the business capabilities within your project (App). You can flexibly combine different feature modules to scale-out the business capabilities of your project (App). This includes seven feature modules: **Anchor starts live streaming, Audience co-broadcasting/cross-room PK, Video recording and editing/video publishing, Audio and video call, Live viewing, VOD playback, Beauty effect.**

Tencent Cloud RT-Cube License

The Tencent Cloud RT-Cube License for the Audio and Video Terminal SDK (Tencent Cloud RT-Cube) includes **Mobile Live Video Broadcasting SDK License**, **Short Video SDK License**, **Player SDK License**, **Terminal Top Speed Codec (TSC) License** and **Tencent Effect SDK License**. You can perform operations such as adding new and renewing each License on the Tencent Cloud RT-Cube Console.
The Tencent Cloud RT-Cube License obtains and verifies the authorization of feature modules under an application through a set of License URLs and Keys. Different feature modules have different features. If the Tencent Cloud RT-Cube version you downloaded includes **Mobile Live**

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Video Broadcasting (Anchor starts live streaming and Audience co-broadcasting/cross-room PK), **Short Video (Video recording and editing/Video uploading and publishing)**, **Video playback**, **Terminal Top Speed Codec (TSC)** and **Tencent Effect** feature modules, you need to obtain the License for free by purchasing the corresponding cloud service resource package to unlock the capabilities of the corresponding feature modules. For details on unlocking feature modules, see SDK Download.

Tencent Cloud RT-Cube License	Unlock Feature Module
Live Streaming License	Publishing a Live Stream + Video Playback
Short Video License	Short Video Production (Simplified Edition/Basic Version) + Video Playback
Player License	Video Playback
Terminal Extreme High Definition License	Terminal Top Speed Codec Transcoding
Tencent Special Effect License	Tencent Special Effect (Beauty Effect)

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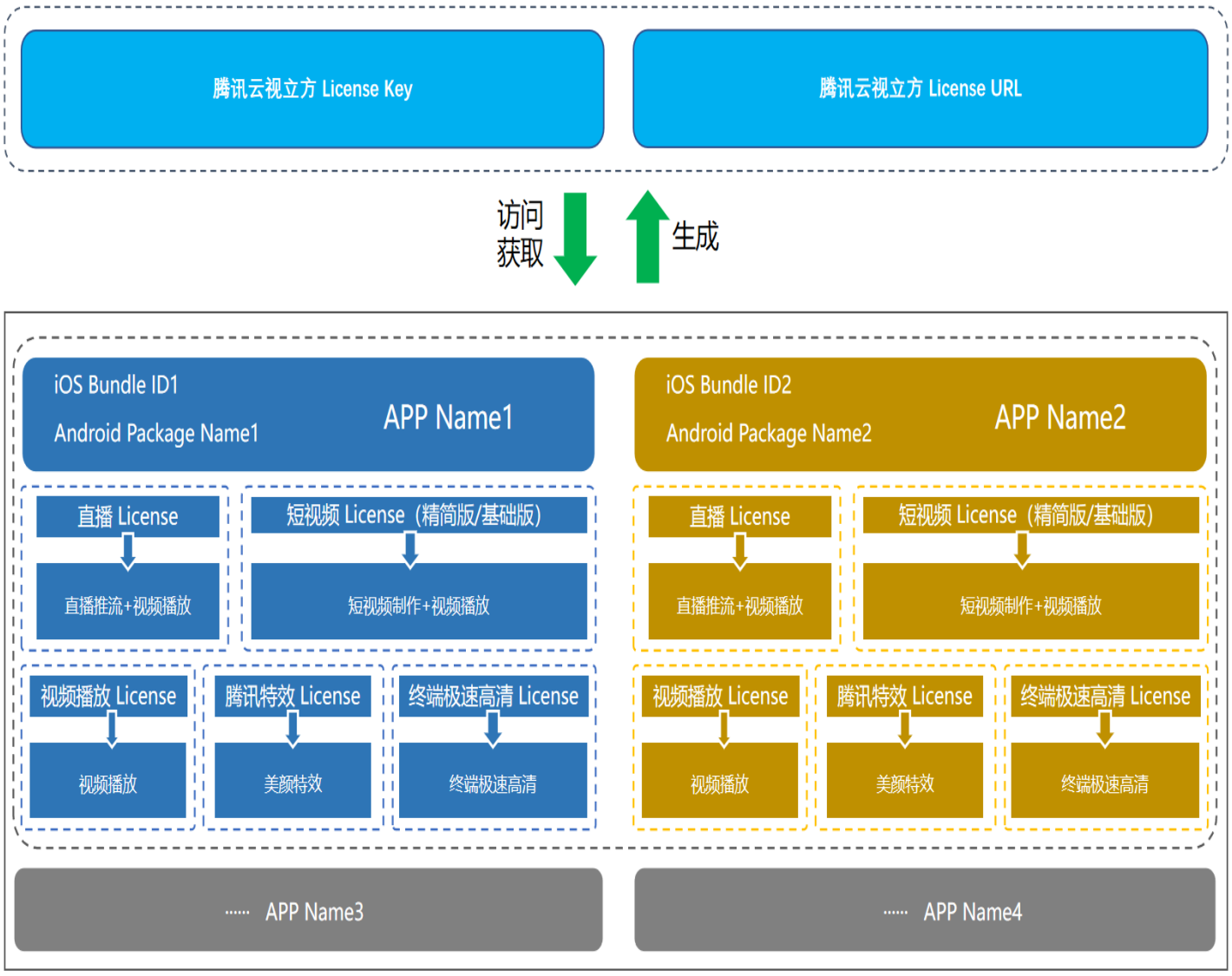

MLVB SDK

Streaming

Streamer pushes local video source and audio source to Tencent Cloud Video CVM, supporting RTMP streaming and RTC streaming.

Pulling Stream

That is live streaming, which refers to the process of pulling and playing the video source and audio source from Tencent Cloud Video CVM through a specified address after live streaming has been implemented. The video source is generated in real time. Live streaming only makes sense when someone is streaming. Once the streamer stops live streaming, the live URL will

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become invalid. Since it is live broadcasting, there is no progress bar when the player plays live videos.

Push Domain Name

It refers to the domain name used for pushing live streaming. It is a required configuration. This domain name must be registered and filed before using the live streaming service. After configuring the streaming domain, the live streaming service will generate the corresponding streaming address. For the splicing rules, please refer to Assembling the Streaming URL Independently.

Playback Domain Name

It refers to the domain name used for playing live streaming. It is a required configuration. This domain name must be registered and filed before using the live streaming service. After configuring the playback domain, the live streaming service will generate the corresponding playback address. For the splicing rules, please refer to Assembling the Streaming URL Independently.

Recording and Playback

The replay feature relies on the support of Tencent Cloud's **Video on Demand Service**. You need to first enable the Video on Demand Service in Tencent Cloud's management console and complete the domain recording configuration in the Cloud Streaming Services console. After the live streaming is completed, you can go to **Media Asset Management** View Video in the Video on Demand console to view the files generated by the recording.

Short Video SDK

Transition

The transition effect when the interface jumps between two videos.

Reverberation

In music performance mode, reverb can enhance the performance experience and realistically reproduce the offline listening experience online. In the field of live streaming, music performances such as singing are typical reverb application scenarios.

Choir

Build two Views through the project, one for playback and one for recording. Then add a button and a progress bar to start recording and display progress. Stop after recording for the same duration as the source video. After synthesizing the recorded video with the source video side by side, the basic feature of video chorus is completed.

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Filter Special Effect

Add various filter effects to videos. Currently, we support 11 filter effects. The start time and end time for each filter effect on the video can be set.

Player SDK

FileID

FileId is the media file ID, which is the globally unique identifier of the file on VOD and is assigned by the VOD backend after successful upload. This field can be obtained from Video Upload Completion Event Notification or VOD Console.

Time Shift

The progress bar of the live streaming being played can be seen below. Drag it backward to return to a specific position. Click **Return to Live Streaming** to watch the latest live streaming.

> **Note:**
> The time-shift feature is in the open beta application stage. If you need it, you can submit a ticket to apply for its use.

Small Window Playback

Small window playback refers to the player that floats on the main window within the App.

Full Screen

- **Screen fullscreen:**
  Refers to filling the entire screen within the screen range. After fullscreen, only the video picture content is visible, and the browser's address bar and other interfaces cannot be seen. This fullscreen requires API support from the browser. There are two APIs that support screen fullscreen. One is called Fullscreen API. After entering screen fullscreen through Fullscreen API, the characteristic is that the player interface composed of HTML CSS can still be seen after entering fullscreen. The other API is webkitEnterFullScreen, which can only work on the video tag and is usually used when the mobile terminal does not support Fullscreen API. After fullscreen through this API, the player interface is the system's own interface.
- **Web page fullscreen:**
  Refers to filling the entire screen within the web page display area. After fullscreen, the browser's address bar and other interfaces can still be seen. Usually, web page fullscreen is a way to achieve a similar fullscreen effect when the browser does not support system

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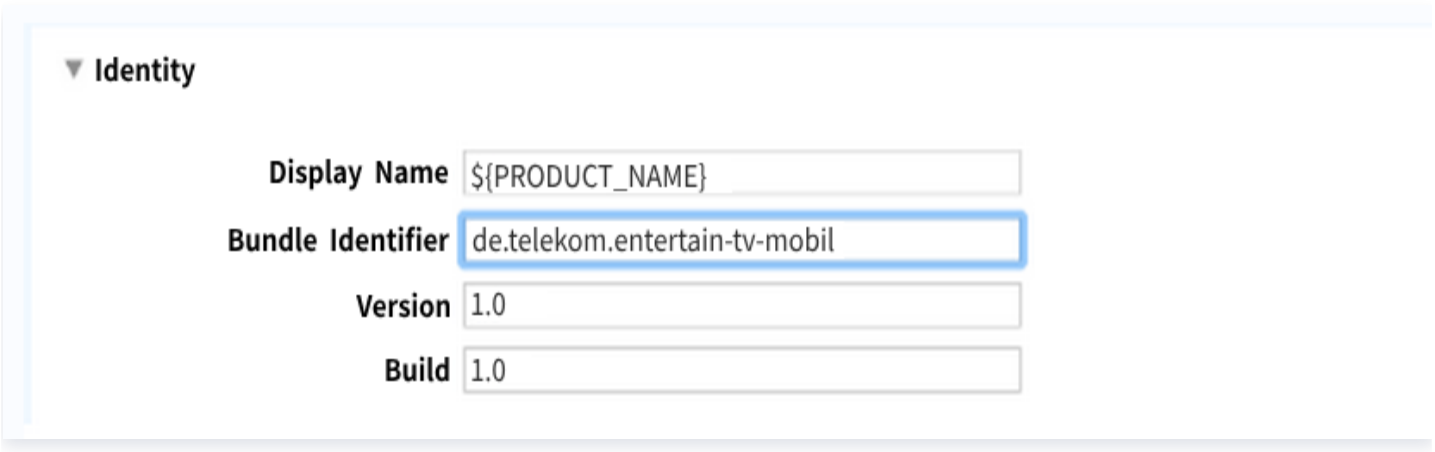
fullscreen, so it is also called pseudo fullscreen. This fullscreen method is implemented by CSS.

Tencent Effect SDK

Bundle ID

Bundle ID, also known as App ID or application ID, is the unique identifier for each iOS application.
iOS can be obtained in **General** > **Identity** in project configuration, as shown below:



Package Name

{Package Name} is also known as package name. It is a concept unique to the Android platform and is a unique identifier for an application.
You can obtain it in the `Mainfest.xml` file under the Android project, as shown below:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.huawei.player"
android:versionCode="20181111"
android:versionName="1.0">
```

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Product Features

Last updated: 2025-03-17 15:13:46

This article mainly introduces the core features of the Audio and Video Terminal SDK (Tencent Cloud RT-Cube).

Live Stream Streaming

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) provides powerful RTMP and RTC streaming capabilities for terminal live streaming scenarios. Combined with the globally distributed 2,000+ nodes of Cloud Streaming Services (CSS), it offers stable and fast high-quality stream pushing services. For details, see Live Stream Streaming.

Live Stream/Playback or On-Demand Playback

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) provides powerful live stream and on-demand playback capabilities for terminal viewing. It supports features such as pause at the beginning, post-roll image, custom LOGO, and password setting. For details, see Player

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Guide.

Audio and Video Interaction

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) supports real-time audio and video mic connection. It is deeply optimized for the differences between live stream scenarios and video call scenarios, enabling one-to-many video mic connection live stream interactions between streamers and audiences.
The core feature of mic connection is two-way audio and video calls between hosts and between hosts and audience. It can be achieved through the live streaming SDK V2 API based on the RTC protocol, enabling hosts to quickly initiate live interactive call, mic connect and enhance the interaction in the live streaming room. For details, see Mic Interactive Call.

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AI Beauty Effect

The audio and video terminal SDK (Tencent Cloud RT-Cube) provides rich animated sticker materials and powerful beauty and makeup capabilities for scenarios such as live streaming and audio and video calls. At the same time, based on Youtu's accurate AI capabilities and Tiantian Pitu's rich real-time special effect processing, it provides diverse and highly free processing capabilities for various video processing scenarios. For details, see Tencent Effect.

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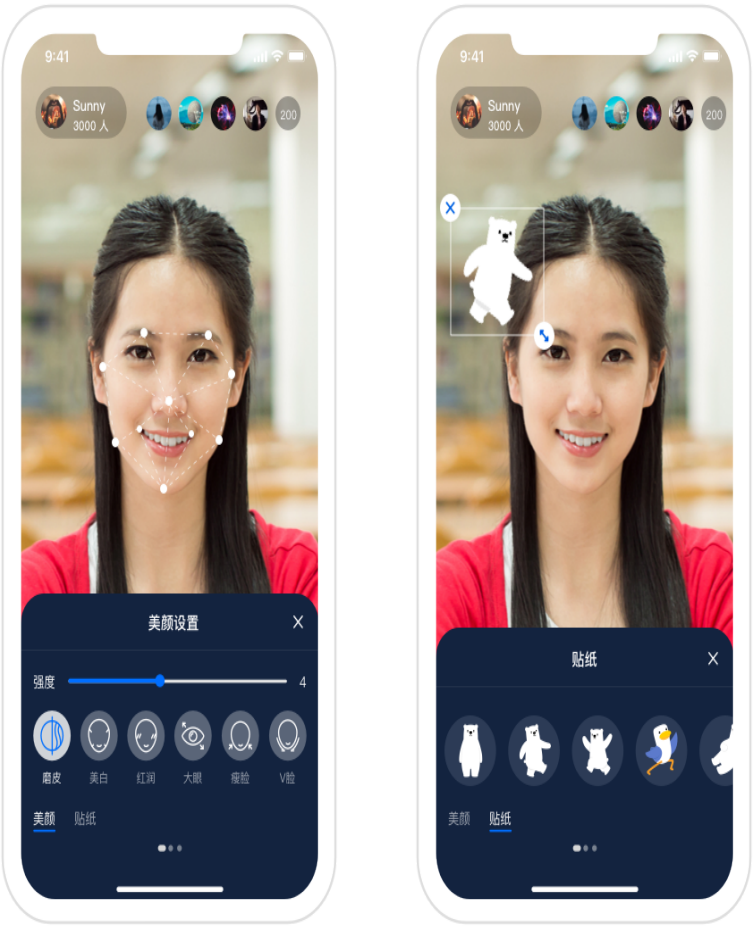

Video Collection and Shooting

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) provides powerful video capture and shooting capabilities for terminal video capture and shooting scenarios. It supports multi-aspect ratio shooting, speed control, segmented recording, and offers features such as beauty effect, filter, sound effects, and background music settings during the recording process. For details, see Photo and Video Recording.

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Short Video Editing

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) provides powerful video editing capabilities for terminal video editing scenarios. It has editing capabilities such as frame timeline, preview by frame, trimming cursor, and speed setting. It also supports features such as time effect, filter effect, filter style, music mixing, animated stickers, static stickers, and bubble subtitles. For details, see Video Editing.

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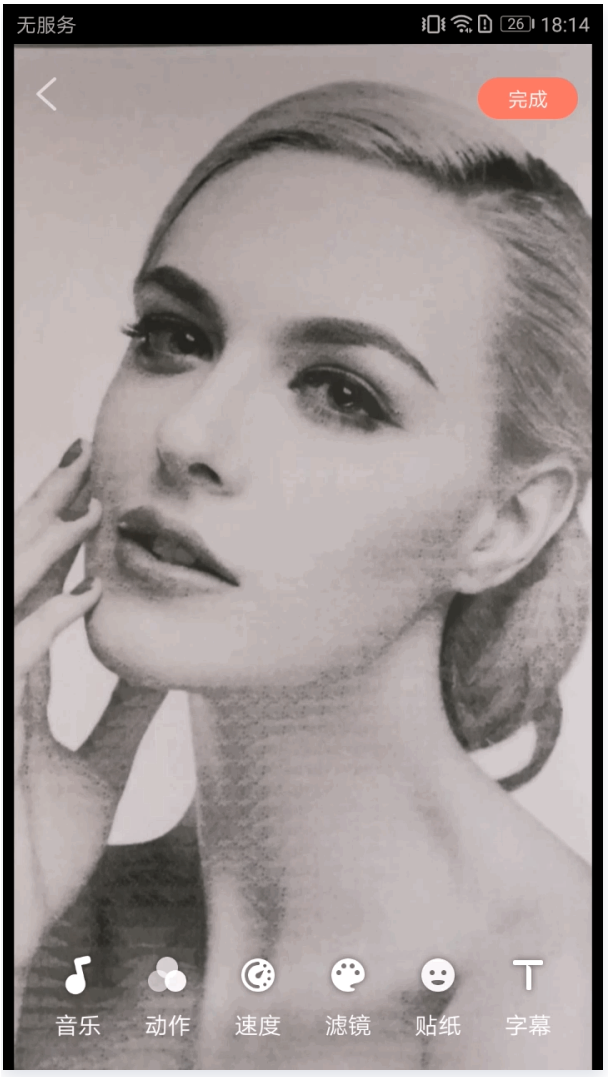

Audio and Video Call

The Audio and Video Terminal SDK (Tencent Cloud RT-Cube) provides exclusive audio and video call features and UI quick integration solutions for customized scenarios such as audio and video calls, easily implementing scenarios like one-to-one video chat, multi-person video call, and chat applications.

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Multi-Person Audio and Video Room

Tencent Cloud RT-Cube Audio and Video Terminal SDK is customized for multi-person audio and video session scenarios such as corporate training, online meetings, and webinars, providing meeting control features such as room management, member management, and screen sharing.

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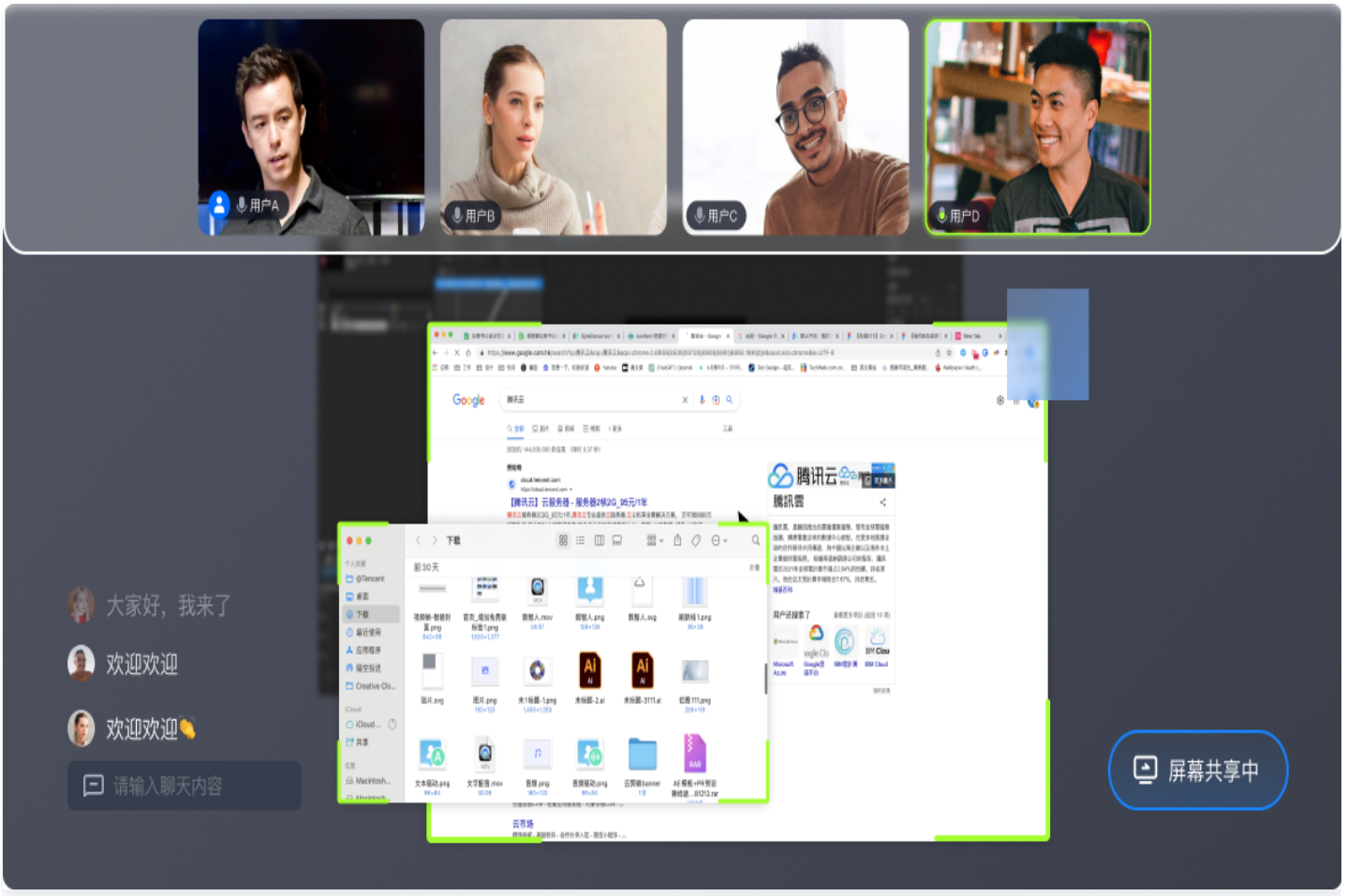

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Advantages

Last updated：2025-03-17 15:13:59

All in One SDK Feature Integration

Integrate the original live stream SDK, short video SDK, player SDK and other multi-terminal audio and video products into one. Seamlessly integrate multiple audio and video capabilities such as terminal live stream, short video and real-time audio and video into one SDK. One integration allows calls everywhere.

Custom Composite SDK

Users can select feature modules as needed based on real business scenarios, customize the combination of the SDK after downloading, and flexibly customize to facilitate the free development of the business.

New License Management

Upgrade the original terminal License management. The new audio and video terminal SDK (Tencent Cloud RT-Cube) management module supports unlocking all terminal authorization capabilities with one License URL, facilitating user integration and management.

Multi-Platform Capability Support

Provide client SDKs and cloud APIs covering mobile phones and desktop platforms, supporting platforms such as iOS, Android, HarmonyOS, Windows, Mac, Web, and mini-programs.

Cloud Platform Integration, Full-Link Optimization of Cloud and End Terminals

The audio and video terminal SDK (Tencent Cloud RT-Cube) provides integrated terminal audio and video and communication capabilities. Through further combination with cloud services, the whole link of cloud and terminal is optimized and upgraded to support features such as live recording and live streaming mic connection on mobile terminals.

Full-Link Data Quality Monitoring

Provide full-link data of the SDK terminal to facilitate users' quality monitoring in business scenarios such as terminal streaming and live and on-demand video viewing. Provide multi-dimensional queries such as account APPID/platform/application package name to offer customers a rich perspective for reviewing the operational impact of the dashboard.

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Use Cases

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To meet the audio and video scenarios of different business needs, the audio and video terminal SDK (Tencent Cloud RT-Cube) provides you with solutions for quick start in different business scenarios.

Mobile Live Video Broadcasting SDK (MLVB SDK)

The MLVB SDK supports live streaming, publishing and playback, interactive co-anchoring between anchors and audiences, cross-room PK by anchors, and other capabilities, providing you with a high-quality live streaming service and quickly meeting the needs of mobile live streaming. It is suitable for various live streaming scenarios such as corporate event live streaming, live shopping, live entertainment shows, and live teaching of large classes.

User Generated Short Video SDK (UGSV SDK)

The UGSV SDK provides services such as video capture and upload, video editing, and video viewing. It is suitable for implementing short video editing and playback business scenarios such as seconds clipping and Weishi.

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Player SDK

The Player SDK provides smooth and stable video on-demand and live streaming services, suitable for implementing various long and short video viewing scenarios such as live and on-demand services on Tencent Video, Bilibili, Weishi, etc.

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Audio and Video Call SDK

The audio and video call SDK provides features such as 1v1 audio and video calls, group calls, and mid-call for scenarios like video calls and online customer service, helping you quickly build stable and reliable audio and video call tool applications.

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Multi-Person Audio-Video Room SDK

The multi-person audio-video room SDK provides a low-code component integration solution with UI for multi-person audio-video interaction scenarios such as enterprise meetings, webinars, and online recruitment.

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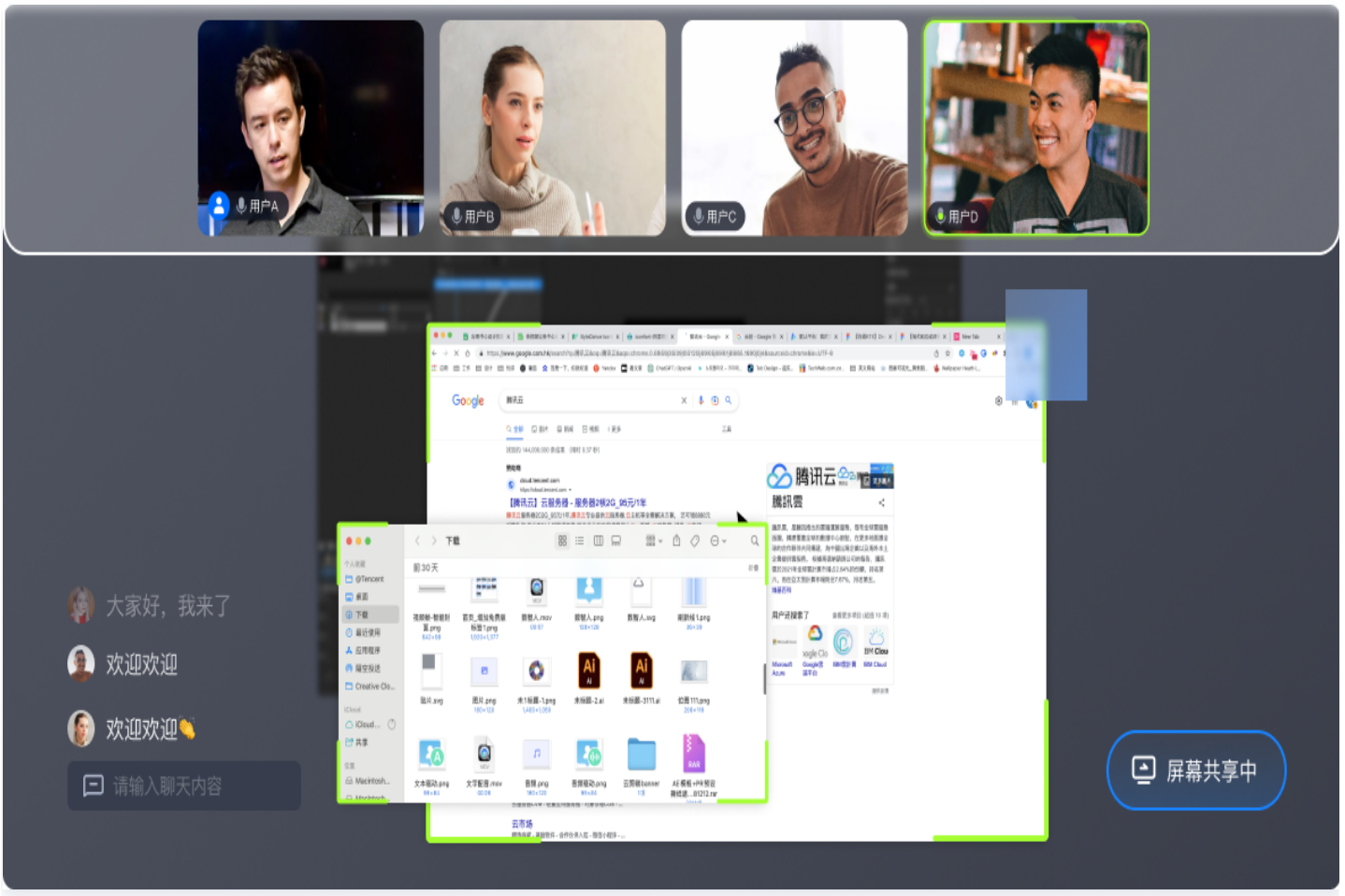

Tencent Effect SDK

Tencent Effect SDK provides rich animated sticker materials and powerful beauty and makeup capabilities for scenarios such as live terminal streaming and audio and video calls. At the same time, based on Youtu's accurate AI capabilities and the rich real-time special effect processing of Tiantian Pitu, it provides diversified and highly free processing capabilities for various video processing scenarios.

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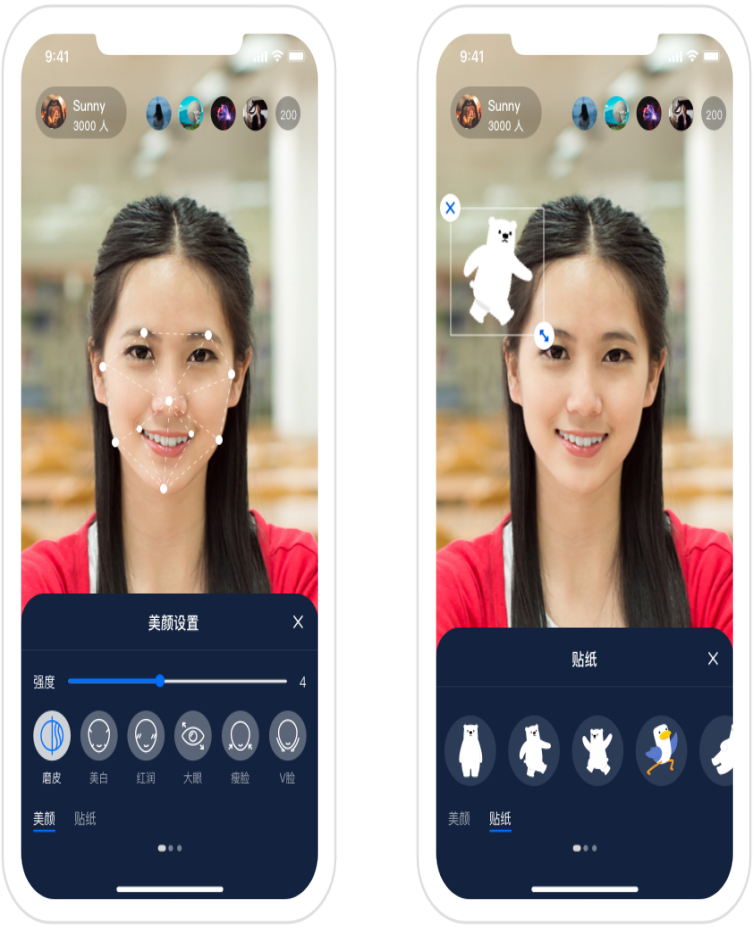

Full-Featured SDK

The full-featured SDK (i.e., audio and video terminal SDK) incorporates the capabilities of all the above SDKs. It integrates several basic services such as Tencent Cloud Live CSS, Cloud Video on Demand VOD, and Real-Time Communication TRTC, providing a range of features including live stream publishing, mic connection between anchors and audiences/anchor cross-room PK, video recording and editing/video upload and publishing, live streaming playback, VOD playback, audio and video call, and beauty effect.

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