

ApsaraVideo Live

Product Introduction

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ApsaraVideo Live is a live audio and video platform based on leading content access and distribution networks and large-scale distributed real-time transcoding technology. It provides high-definition and fluent live audio and video services that are conveniently accessible, with low latency and high concurrency.

ApsaraVideo Live provides a Web-based management console, APIs and software development kits. With them, you can use and manage live video services and integrate them with your own apps and services.

All the services are billed by usage. The service capacity is scalable. Bid farewell to complicated architecture designs and programming development and the maintenance cost is nearly zero, so that you can focus on the implementation of your business logic and enhancement of your end user experience.

Overview of main features

Category	Feature	Description
Live video capture	Stream pushing protocol	Supports stream pushing RTMP.
	Stream pushing mode	Supports Alibaba Cloud's stream pushing SDKs and Demos for iOS, Android, and Web, in addition to common third-party stream pushing software such as OBS, XSplit, and FMLE.
	Stream pushing device	Supports common third-party codecs or boxes based on stream pushing RTMP.
Live video watching	Stream pulling protocol	Supports stream pulling RTMP, FLV, and HLS.
	Stream pulling mode	Supports Alibaba Cloud stream pulling SDKs and Demos for iOS, Android, and Web, in addition to common third-party stream pulling software such as VLC.
Live video management	Management mode	Supports graphical management and API

		management using the console.
Console management	Domain management	Creates, modifies, or deletes a domain name; and enables or disables a live video service.
	Template management	Creates, modifies, or deletes transcoding, screenshot and Mic interaction templates.
	Console statistics	Collects and queries the real-time downstream bandwidth, downstream traffic, online viewers, requests (on the operator/region dimension), and quantity and status of live streams.
	Live video screenshot	Supports real-time screenshot overwriting and storage, as well as the custom screenshot frequency.
	Real-time transcoding	Supports the LD, SD, HD, and UHD bit rate formats, and the adaptive aspect ratio of transcoded videos.
	Narrowband HD transcoding	Supports the LD, SD, HD, and UHD bit rate formats, and the adaptive aspect ratio of transcoded videos.
Live video security	URL authentication	Supports the custom authentication key and expiration time.
	Anti-leech	Domain black/white list control
	IP black/white list	Supports IP black list control.
Data statistics	Traffic statistics	Collects traffic data for statistics with the granularity of a single day
	Peak bandwidth statistics	Collects the peak bandwidth for statistics with the granularity of a single day
API management	API traffic management	Creates, modifies, deletes, enables, or disables a live video domain; queries the number of current concurrent viewers; and creates or stops a screenshot task.

	Live video screenshot	Takes screenshots throughout the course of live broadcast and saves them to the Alibaba Cloud OSS platform using APIs.
	Live video transcoding	Transcodes a live video to multiple formats using APIs.
Interactive live video	Service support	Supports service multiplexing and custom service templates.

Various solutions

ApsaraVideo Live provides a full range of technical solutions from streaming, transcoding, distribution to playback, as well as self-adaptive uplink bit rate, narrow-band HD transcoding, screenshot and time shifting among other features and services.

Smoothness, low latency and high concurrency

ApsaraVideo Live boasts the lowest video lagging rate industry-wide, and the smoothest live video watching experience across the network. ApsaraVideo Live adopts the best-quality BGP routes and bandwidth to reduce live video latency and ensure real-time interactions in live videos. With a concurrency capacity of 10 million live streams, the live video technical architecture can be dynamically scalable to escort your live video services.

Global coverage

ApsaraVideo Live has 1,000-plus live video nodes to cover all mainstream countries in the world. ApsaraVideo Live paves the road for your live video businesses to go abroad.

Industry-tailored and scenario-oriented

ApsaraVideo Live has mature industry-tailored solutions to cover almost all the live video application scenarios. ApsaraVideo Live provides live video solutions for e-commerce, entertainment, online education and gaming industries.

Multi-terminal adaption and seamless watching experience

ApsaraVideo Live provides collection SDKs and playback SDKs for multiple platforms and terminals, covering Android, iOS devices, TV sets and STBs. The cloud synchronization technologies ensure that the video can be played on multiple terminals at the same time to provide a seamless watching experience.

Safe storage and security protection

ApsaraVideo Live provides URL encryption, video encryption, anti-leech and other multiple security protection approaches to reduce the risks of live video bootlegging and broadcasting without consent from the copyrighter, securing maximum benefits to customers.

Use Alibaba Cloud ApsaraVideo Live to create a variety of live broadcast applications that are fit for various scenarios and can meet most live broadcasting needs

- This service features high concurrency, low latency, over 1,000 CDN nodes around the world, millisecond-level response, intelligent navigation routes, and support for ten million concurrent online users.
- This service provides a multi-layer anti-leech function, including refer anti-leech protection, UA header anti-leech protection, IP address anti-leech protection, and URL authentication verification, to completely address the danger of leeching.
- Panoramic data statistics enable a wide array of analysis perspectives, and customer portraits facilitate business expansion.
- This service supports multiple features, such as real-time cover, real-time transcoding.

Live finance

Functions and features

- Offers a full range of technical services tailored for finance lecturers, including desktop demonstration, HD transcoding, and time-shift playback, and statistics of online viewers and live traffic.
- Supports live broadcast on various terminals, such as mobile devices, PCs, or the Web; supports video playing formats on the entire network, including live streams in the HLS, RTMP, and FLV formats, which enables rapid distribution of live content to terminals.
- Provides the dedicated and high-privacy financial cloud, ensuring content security for live broadcast customers in the finance sector.
- Provides detailed statistics, helping financial platforms better analyze investors' investment behavior.

Application scenarios

Live finance can be used for real-time stock index analysis, online experts' lectures, online experts' live technical analysis, and investor guidance.

Live sports events and concerts

Functions and features

- Meets the high-concurrency and high-definition live video broadcast requirements. Its

- complete content distribution system ensures stable and smooth broadcasting.
- Provides the narrowband HD transcoding service, helping customers with large downstream traffic save traffic costs.
- Transcodes them to multiple formats, and spreads them on the network.
- Supports live broadcasting on the mobile side, PC side, or Web side. This service also provides flexible players for mobile devices and Web, and issues live streams of HLS, RTMP, and FLV to meet different viewing needs.
- Provides detailed statistics, helping analysis of viewers' behavior and live profiles after sports events.

Application scenarios

This service is applicable to large concerts, games, sports events and other live scenarios.

Interactive live broadcasting

Entertainment interaction

Functions and features

- Meets the ultra high-concurrency, low-latency, and multi-definition live video requirements.
- Supports live broadcasting on the mobile side, PC side, or Web side, enabling flexible and comprehensive live modes to apply to different scenarios.
- Provides stream pushing SDKs on the mobile side, and supports the beautifier and filter functions. This service offers player SDKs and Demos on the mobile side and Web side, and is capable of distributing live streams in HLS, RTMP, and FLV formats.
- Provides multidimensional statistics on live video popularity, viewer, and region popularity distribution, number of viewers, and downstream peak traffic, helping users better analyze the live videos.
- Supports real-time editing and media transcoding functions.
- Provides instant communication, which greatly enriches interaction between the host and viewers during live broadcasting.
- Supports porn identification for live videos to ensure live content security.

Education interaction

Functions and features

- Presents PowerPoint slides during the entire class, and features low latency, synchronous broadcasting around the world, and interaction between countries.
- Supports live broadcasting on various terminals, including mobile devices, PCs, or the Web; supports video playing formats on the entire network, including live streams of HLS, RTMP, and FLV; and rapidly delivers content of live videos to terminals; Contributes to flexible and

- comprehensive teaching that can adapt to different teaching scenarios.
- Provides detailed statistics to help analyze teachers' teaching and students' viewing activities.
- Supports real-time editing and transcoding.
- Supports instant communication to greatly enrich interaction between teachers and students in class.

Application scenarios

This service is applicable to open online courses and private training sessions.

Live conference

- Supports ten thousand concurrent users, cross-platform video conferences, and on-site simultaneous interpretation.
- Supports low-latency internal enterprise training and conference communication to improve the communication efficiency.
- Supports live broadcasting on various terminals, including mobile devices, PCs, and the Web; supports video playing formats on the entire network, including live streams of HLS, RTMP, and FLV; and rapidly delivers content of live videos to terminals.
- Supports real-time editing and transcoding.
- Provides instant communication to facilitate conference interaction and greatly improve efficiency of internal business communication.

Application scenarios

This service is applicable to large live conferences.

This service is also applicable to internal enterprise training.

Live video APIs

Date	Feature
2016-04	<ul style="list-style-type: none">Queries the live stream historyQueries the ongoing live stream listManages the live stream blacklistQueries the online viewers of a live streamQueries the frame rate and bit rateSets NotifyResumes live streamingDisables live streaming

2016-09	<p>Adds and deletes transcoding configuration</p> <p>Queries transcoding configuration information</p> <p>Adds screenshot configuration</p> <p>Deletes screenshot configuration</p> <p>Queries screenshots under a domain</p>
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Live console

Date	Feature
2016-04	<p>Queries and adds a live video CDN domain</p> <p>Supports authentication settings</p> <p>Queries and manages live streams</p>
2016-09	<p>Manages screenshots</p>
2016-10	<p>Adds stream pushing monitoring</p> <p>Adds live video resource monitoring data</p>