

# ApsaraVideo Live

## Product Introduction

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## What is ApsaraVideo Live

ApsaraVideo Live is an audio-video platform based on the latest accessible content, widely distributed network and largely distributed real-time transcoding technology. It offers high-definition, live audio-video feed services that are fluent and easily accessible with low latency rate and are high in concurrency.

ApsaraVideo Live offers a web-based management console, APIs, and software development kits that help to use and manage live video services and integrate them with your own apps and services.

All ApsaraVideo Live services are billed by usage, and service capacity is scalable. Moreover, features such as simple architecture designs, better programming development and low maintenance costs help you to focus on building your business logic and enhance user experience.

## Features

### Main functions and 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 softwares such as XSplit, and FMLE.
	Stream pushing device	Supports common third-party codes or boxes based on stream pushing RTMP.

Live video watching	Stream playing protocol	Supports stream playing RTMP, FLV, and HLS.
	Stream playing mode	Supports Alibaba Cloud stream playing SDKs and Demos for iOS, Android, and Web, in addition to common third-party stream playing softwares such as VLC.
	Stream pulling mode	Supports flv and rtmp.
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, and screenshot templates.
	Console statistics	Collects and queries the real-time downstream bandwidth, downstream traffic, online viewers, requests (in the operator/region dimension), and quantity and status of live streams.
	Live recording	Supports FLV, MP4 and M3U8 recording, and supports custom recording time duration.
	Live video screenshot	Supports real-time screenshot overwriting and storage, in addition to 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 custom authentication key and expiration time.
Data statistics	Traffic statistics	Collects traffic data for statistics (granularity of one

		day).
	Peak bandwidth statistics	Collects the peak bandwidth for statistics (granularity of one 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 through 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.
SDK support	Streaming SDK	Real-time adjusting streaming parameters, adaptive bit rate, frame rate, watermark and beautification parameters according to network condition of the streaming end.
	Player SDK	iOS, Android and Web player SDKs, support multiple playing format.
	Live SDK	iOS and Android SDKs, packaging streaming, playback SDK.

## Benefits

## Various solutions

ApsaraVideo Live provides a full range of technical solutions from streaming, transcoding, and distribution to playback, in addition to responsive 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. ApsaraVideo Live adopts best-quality BGP rooms 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 scaled to handle any live video service requirements.

## Global coverage

ApsaraVideo Live has 1,300-plus live video nodes for full global coverage.

## Industry-tailored and scenario-oriented solutions

ApsaraVideo Live has mature, industry-tailored solutions that encompass all manners of live video application scenarios. ApsaraVideo Live provides live video solutions for industries including e-commerce, entertainment, online education and gaming industries.

## Multi-terminal adaption and seamless watching experience

Cloud synchronization technologies ensure that a video can be played on multiple terminals at the same time to provide a seamless viewing experience.

## Safe storage and security protection

ApsaraVideo Live provides URL encryption, video encryption and other rigorous security protection solutions to reduce risks including illegal recording and broadcasting live video without copyright consent.

## Edge streaming

The edge streaming function preferentially pushes your video streams to the optimal CDN node to ensure that users can access the best uplink network. Besides, it can minimize such problems as video lagging and slow stream-pulling ratio caused by uplink transmission.

## Advantages

**Wide coverage:** over 1500 CDN nodes all over the world, and over 700 nodes in mainland China, covering main stream cities and regions.

**Intelligentization:** to preferentially access the CDN node nearest users, so as to ensure the transmission stability.

## Edge streaming and center streaming comparison

	Edge streaming	Center streaming
Description	Preferentially schedule stream data to the optimal node nearest to user, and transmit the data to Alibaba Cloud' s live center directly and rapidly for content delivery by using Alibaba Cloud' s intelligent scheduling system.	Transmit video streams directly to live center for content delivery by using BGP.
Advantage	Rich CDN nodes, wide coverage to ensure optimal link transmission.	High-quality multi-line BGP room.