

Cloud Application Rendering

SDK Documentation

Product Documentation



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Last updated: 2026-08-20 15:56:55

The CAR solution is equipped with a high-performance SDK development kit, providing developers with a standardized and modular cloud rendering capability access system. Through well-designed APIs and a cross-platform architecture, it fully covers three mainstream terminal scenarios: web browsers, Android mobile devices, and the iOS ecosystem, meeting diverse development needs ranging from lightweight web applications to native mobile applications. It enables seamless access across all terminals, ushering in a new era of immersive experiences.

Feature Strengths

- Full-stack technology integration: A real-time rendering pipeline based on an adaptive streaming protocol, combined with an intelligent encoding module that supports dynamic multi-resolution switching and a low-latency distribution network covering global nodes, forms a powerful core advantage.
- Efficient development support: Standardized APIs are provided, enabling developers to easily invoke cloud rendering resources, control frame streaming and synchronize interactive commands. Without worrying about the underlying architecture, developers can quickly build cloud rendering applications with high image quality and low latency.
- A complete technical ecosystem: Detailed API reference documentation, a multi-language code sample library, and Demo projects covering mainstream development frameworks are provided on the GitHub open-source platform. These resources include three implementation approaches: Web frontend, native Android, and native iOS applications, helping developers accelerate their development process.
- Production environment validation and technical support: All examples are validated in production environments, support one-click import into mainstream development toolchains, and provide step-by-step integration guides and solutions to common issues. Visit the GitHub repository to obtain the latest SDK development kit.
- A wide range of application scenarios: Whether you are building a GS platform, an industrial visualization system, or exploring metaverse application scenarios, our cloud rendering SDK will become your trusted technical foundation.

Use Cases

Scenario		Description
Entertainment and gaming	GS platform	Provide high-definition, low-latency gaming experiences without requiring high-end hardware devices.
	Virtual reality (VR) games	Render VR game graphics in the cloud to deliver immersive experiences through lightweight devices.

	Online interactive entertainment	Support interactive entertainment activities for simultaneous multi-user participation, such as virtual concerts and online parties.
	Game trial and review	Deploy game trial versions quickly in the cloud for players or reviewers to experience.
	Game live streaming and recording	Stream or record games in the cloud to reduce the load on local devices.
Education and training	Remote education	Provide high-quality remote education services with real-time interaction and screen sharing.
	Virtual lab	Build virtual labs in the cloud to simulate real experimental environments and operation processes.
	Vocational skill training	Deliver vocational skill training through cloud rendering, such as 3D modeling and animation design.
	Online seminars and meetings	Support multi-user online seminars or meetings with high-definition video transmission and real-time interaction.
	Virtual classroom	Build a virtual classroom environment to provide immersive learning experiences.
Industry and commerce	Industrial visualization system	Enable visual monitoring and management of industrial equipment in the cloud.
	Product design and presentation	Display product design effects through cloud rendering and support real-time modification and interaction.
	Virtual exhibition hall	Build a virtual exhibition hall to showcase enterprise products and services, improving customer experience.
	Remote collaboration and review	Support multi-user remote collaboration and review to improve work efficiency.
	Business analysis and decision support	Perform business data analysis and visualization through cloud rendering to support decision-making.
Arts, culture, and future exploration	Digital art exhibition	Host digital art exhibitions in the cloud and showcase artists' works.
	Cultural heritage protection and	Protect and display cultural heritage through cloud rendering technology to achieve digital preservation and

	presentation	dissemination.
	Virtual reality museum	Build a virtual reality museum to provide immersive visiting experiences.
	Metaverse application scenarios	Explore cloud rendering applications in the metaverse, such as virtual social networking and virtual economy.
	Sci-fi and future technology experience	Present sci-fi scenes and future technology through cloud rendering technology to provide unique experiences.

SDK Download