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SCALABLE ULTRA-LOW LATENCY POINT-CLOUDS AND TVM TRANSMISSION SDK



SOLUTIONS

This SDK transports volumetric data from end to end using existing scalable networks. Potential applications include:

- AR/VR/XR with real-time interactions (Social VR, Gaming, healthcare, manufacturing, education/training, live events, military and defence, real estate and virtual shopping, ...)
- Movie production involving the compression, storage and live preview of volumetric data.

SDK TECHNOLOGY FEATURES

- 1. Provides an end-to-end transmission SDK for all platforms.** Includes a streaming component (native only), some optional server components (native only), and a reception component (native, Web and mobile).
- 2. Enables ultra-low latency transmission** (this latency is the addition of 1 frame processing, the network transmission time and the player buffering).
- 3. Low footprint** in term of CPU, memory and network overhead.
- 4. Delivers 3D volumetric content** as well as video, audio, subtitles and metadata.
- 5. Includes an SFU** (Stream Forwarding Unit) allowing to relay streams with zero-latency. Ideal for testing or for events that don't involve a CDN.
- 6. Keeps compatibility with existing CDNs and with edge-computing** to scale the number of viewers while keeping latency low.
- 7. Integrates an optional MCU** (Media Composition Unit) to handle server-side adaptive bitrate (ABR) with up to 80% gains. May be CPU intensive.

TECHNICAL DESCRIPTION

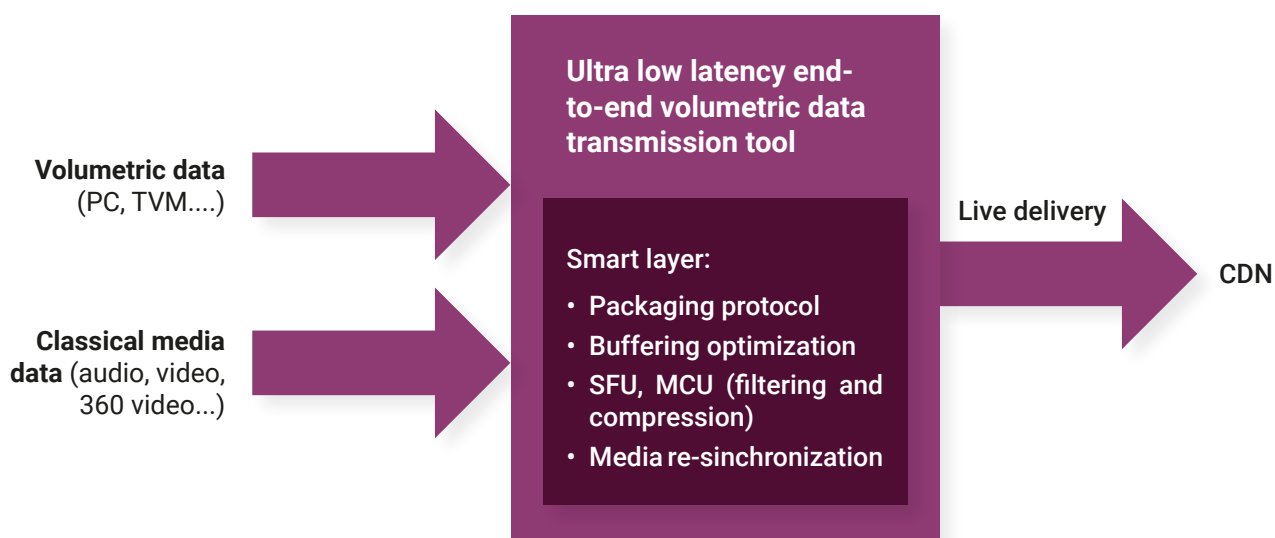
- MPEG-DASH over CMAF.
- Adapts to any kind of volumetric data from Point Clouds (V-PCC, G-PCC), Mesh/TVM, MPEG
- 3DoF+, or using a generic container to transport your own data your own way.
- Enables to handle legacy media: video, audio, subtitles, metadata (including timed metadata).
- Can operate in three modes: live, linear or on-demand.
- Offers a smart layer system enhancing adaptive filtering, compression and buffering optimization that can leverage existing player optimizations.
- Uses the latest works from standardization organization such as MPEG, DVB, ATSC.



A TURNKEY SOLUTION



Volumetric video and 3DoF+ contents are still innovative formats. Our team can accommodate and help you with:

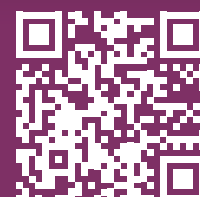
- A comprehensive offer including capture, encode, transmission, and playback (native, mobile, and Web) software and expertise.
- Providing and licensing software according to your needs.
- A service offer including trainings, customer developments, and support.
- Uses the latest works from standardization organization such as MPEG, DVB, ATSC.



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