streame!©

The Streaming SDK Swiss Army Knife for Multimedia Apps

Business Benefits

streame!© brings a real opportunity for easy and efficient streaming media delivery dealing with an all device ecosystem

streame!© overcomes multiple stream synchronization to provide richer experiences under demanding low latency requirements

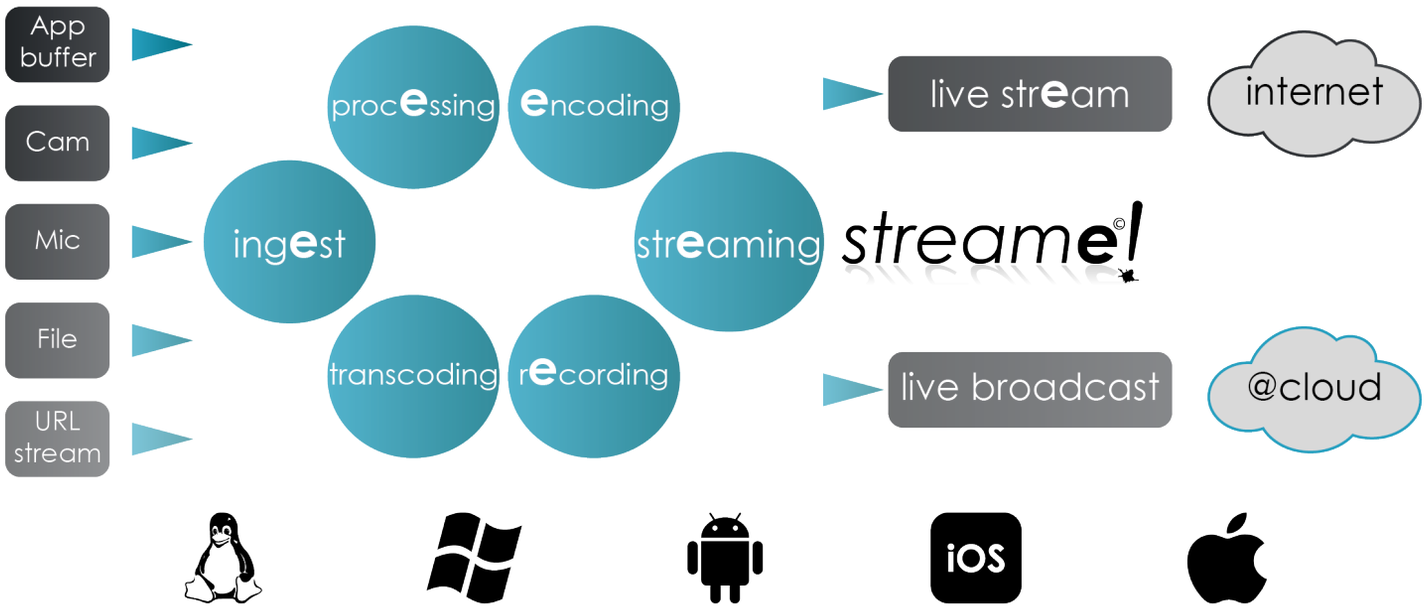
streame!© boosts prototyping developments bridging native SDKs

streame!© harvests a vibrant set of encoders including broadly adopted standard industry formats and next generation HEVC, encompassing emerging protocols such as MPEG-DASH

streame!© simplifies streaming media delivery setting all of the relevant parameters for successful multi-platform streaming

streame!© brings reliability, scalability, and availability for live broadcasting through a cloud delivery service

Flattening Universal Streaming Reach



Use Cases

✓ Live remote monitoring of ophthalmologic analysis and diagnosis sessions including multiple synchronized streams with eye movements and stimulus

✓ Recording of ophthalmologic analysis/diagnosis sessions publishing media time stamp for additional annotation time stamped files

✓ Stream video and audio for SIP video calls with low latency

✓ Live remote monitoring and bookmarks recording triggered by sensors for embedded transport surveillance systems

✓ Multiple HD live streaming under demanding low latency constraints

✓ Mux of multiple synchronized video layers

✓ Encoding parsing and timing monitoring

✓ Manage platform-specific formats and qualities

✓ Leverage built-in chip for fast and efficient encoding

✓ Stream captured raw image to a remote app viewer

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Modules and Applications

module	*Description*	*Applications*
ingest	Reduce content preparation time and cost Universal Access Point from application media signals and real-time metadata Deal transparently with native capturing SDK	Augmented Reality Camera based apps Multi source media mixing MAM (Multimedia Asset Management) Systems
processing	Pre-Processing including audio equalization and image color balancing Perform media signals mixing	Multimedia Edition/Authoring tools
transcoding	Adapt streams to target standard formats Adapt files to target standard formats	Content Management Systems (CMS) Broadcast/Broadband convergence
encoding	Improve device reach by supporting multiple streaming formats across a variety of devices Hide end device complexity exploiting built-in device HW Bring universal transcoding	Dynamic real time encoding tracking network and device context Next gen format apps
recording	Reduced content management effort Enable timing monitoring Support synchronized muxing	Timestamp based annotations apps Medical image repositories Expert reports Customizable multichannel playing Sensor based bookmarks/clips for embedded transport systems
streaming	High-Quality and low latency streaming automatically delivered to different platforms from a single content source Accelerate streaming media adoption Generate separate streams for each supported device format. Support unicast streaming Bridge synchronized multi-streaming	Second/Multi-screen apps Live multimedia sharing Accurate timestamp based apps Apps requiring synchronization of multiple live stream Low latency constrained apps Video call based apps Remote Surveillance Factory supervisory control and data acquisition (SCADA) display Virtual desktop infrastructure (VDI) Cloud Gaming for ultra-thin clients Remote Labs extending IP capabilities to local acquisition apps Efficient delivery of local media to remote repositories Advanced advertising insertion
Broadcasting @Cloud	Live streaming automatically delivered to multiple platforms from a single content source Complete head-end solution for cloud delivery of scalable live broadcast	Live event broadcasting Seminars / MooCs

	Language	*OS*
All modules	C++	Windows | Linux
	Objective-C	OS X | iOS
	Java	Android

video formats: *spanning YUV, RGB and Grayscale colorspaces* ***audio formats:*** *integer and float audio for different bit depths and multichannel setups* ***container formats:*** *AVI, OGG, 3GP, MOV, MP4, FLV, MPEG-PS/TS, MKV, WEBM* ***streaming:*** *RTP, RTSP, RTMP, HTTP, HLS, MPEG-DASH* ***video codecs:*** *MJPEG, H.263, WMV8, MPEG-2, MPEG-4, H.264-AVC, H.264-MVC, VP8, HEVC (based on Open Source 3rd party codec packs)* ***audio codecs:*** *Raw-PCM, mu-law, a-law, G.72X, GSM, WMA2, MP3, AAC, AC3* ***cross-platform:*** *including preset profiles for standards and qualities (bitrate) matching source and destination platforms (OS)* ***streaming:*** *live, tuned for low latency features, and on demand, including unicast and broadcasting through integrated cloud services* ***multi-platform:*** *running on Linux, OS X, Windows, Android and Ios* ***code languages:*** *developed in C++ (Core in C) and providing Objective-C and Java modules to leverage native device SDKs*

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