RAW 4K

Media Servers

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Tired of limited color subsampling, banding effects and jitter when presenting videos on large format displays and screens? We are pushing the limits of current video playback solutions with our top level media server platform Wings Engine Raw delivering up to 4 times uncompressed 4K60 playback.

**Uncompressed
Video Playback**

Video compression is one of the major challenges in media applications these days. Everyone knows compression artifacts such as color fringes or pixelated pictures. Wings Engine Raw is built and optimized for playing uncompressed video contents which avoids all the negative effects of video compression.

Highest Resolution

Wings Engine Raw is capable of playing up to 4 times 4K uncompressed video content at 60fps. These contents can be native picture sequences like TGA or TIFF without any need to convert it into any intermediate codec format. Wings Engine Raw is even capable of processing PNG sequences straight away.

Maximum Color

Depth

By reducing the quantity of colors used in videos the amount of data and processing time is massively reduced. However this way also the picture quality suffers and the overall viewing experience is drastically impaired. Wings Engine Raw is capable of processing and delivering video content at the full 4:4:4 color sampling.

Realtime color space transformation

Wings Engine Raw interprets the source color profiles of images and videos and automatically transforms them into any destination color space in realtime. This way content handling is simplified since it is not neccessary to make any time consuming conversions to match color profiles in advance. In any case Wings Engine Raw utilizes the full color space of the display or projector without global restrictions (e.g. to sRGB).

Realtime Frame Blending

If the content source has been produced in a lower frame rate than the display or projector supports our RenderEngine(tm) is can produce intermediate frames in realtime to achieve a smoother video playback.

Highest Data Rate

The core of a Wings Engine Raw is a custom engineered RAID 10 system which features a constant data stream of 4x uncompressed 4K content at 60fps plus up to 16 text and picture layers plus up to 24 uncompressed audio streams. On top of all that this data system not only features a massive data throughput but also features redundancy. Even if one of the SSDs fails the data rate and the system?s functionality in general is not impaired.

Highest Software Performance

Wings Engine Raw hosts our new WingsRX(tm) render core engine which has been developed and optimized especially for premium picture quality applications. Its 64bit program architecture and clever usage of SSE CPU instructions leads to an unequaled decentralized processing power. Of course Wings Engine Raw also comes with our proven embedded operating system, Backup-Manager, features a dedicated EDID management as well as our award winning automatic camera based calibration system for softedge blending and geometry mapping.

Most Advanced Hardware Plateform

Instead of standard consumer/gaming computer hardware Wings Engine Raw contains professional server technology derived from professional IT data center equipment. Wings Engine Raw comes with Xeon CPU, redundant high performance power supply, 2×10 GBit LAN, server chipset, up to 8 3G-SDI live inputs and Displayport 1.2 and DVI-D output connectors.