Synamedia

Flexible, High-Quality Encoder/Transcoder for Live Broadcast and ABR Streaming Video

Synamedia's vDCM Encoder is a software-based encoding/transcoding solution. Based on Synamedia's in-house developed and patented compression engines, the solution provides exceptional picture quality at all bitrates, enabling broadcasters and service providers to deliver an outstanding viewing experience at minimum bandwidth. Incorporating new VIVID AI technology and other enhancements, the vDCM Encoder continuously improves video quality and bitrate reduction, guaranteeing a smooth viewer experience on any device.

Easily scalable with an intuitive user interface, the vDCM Encoder simplifies your initial configuration and day-to-day operations. And the flexible solution is designed to run on-premises as a software-defined appliance or on a public cloud or private cloud to give you utmost flexibility.

Deliver Cost-Effective, Cutting Edge Experiences

vDCM Encoder is the industry's most comprehensive encoding/transcoding solution, offering an unmatched combination of picture quality, bandwidth efficiency, low latency, flexibility, scalability, ease of use, and functional richness. The solution supports diverse compressed and uncompressed formats – including Zixi, SRT and RIST, RTMP, MPEG-2 transport stream, SDI over IP, and traditional SDI – as well as all video resolutions, from SD to ultra-HD. vDCM Encoder also supports myriad input and output audio formats, while introducing immersive audio.

The solution supports constant and variable bitrates with our award-winning smart rate control, statistical multiplexing, and adaptive bitrate streaming for both live broadcast and IPTV. Thanks to thorough and continuous optimization of CPU efficiency, the solution delivers exceptional levels of density. And with an availability rate of 99.999%, the vDCM Encoder incorporates Synamedia's multi-layered approach of providing redundancy at the device, transport stream and service levels.
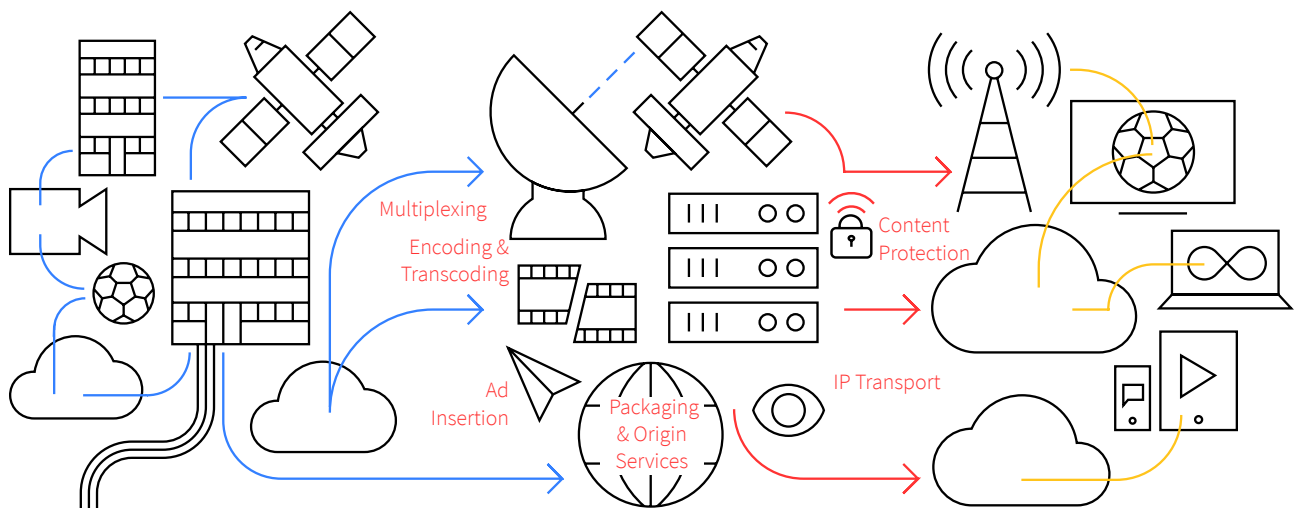
Take your Business to the Next Level

Synamedia's vDCM is the industry's most comprehensive video processing platform. Covering all processing functions – from grooming/multiplexing, through encoding and transcoding, to packaging and IP transport – vDCM is a software-centric application on a single converged platform. Featuring advanced video and audio codecs while supporting all ABR streaming and packaging formats, vDCM boosts your business in multiple ways.

At the heart of Synamedia's video network portfolio, vDCM optimises bandwidth usage and latency to deliver true live personalised video experiences in pristine quality. With a 20-year proven track, the end-to-end vDCM platform enables you to build highly dependable and available workflows for 24/7 processing. Offering the industry's richest feature set, Synamedia's market-leading vDCM is a scalable service that you can trust.

Highlights

- Uses in-house patented compression engines for highest compression efficiency
- Addresses broadcast/IPTV, multicast, and ABR HTTP streaming
- Harnesses low latency mode by supporting MPEG-DASH, Apple HLS and HESP
- Leverages dynamic audio leveling according to CALM/EBU R128
- optimises CPU utilization to maximise density and minimise costs
- Offers 24/7 reliability with advanced redundancy, including transport stream and service level backup

Video Network Chain

Features and Benefits

Deliver the best experience on any screen

- Leverages Synamedia's AI-optimized compression algorithms to provide exceptional audio and video quality using the least number of bits
- Utilises advanced audio level adjustment features to enhance the user experience
- Features low latency mode to offer true live video
- Optimises bandwidth usage on any network without compromising quality to increase network efficiency

Focus on business benefits

- Maintains outstanding CPU efficiency to maximise density and minimise infrastructure costs
- Enables ad and local program insertion to monetise premium video quality and generate revenue
- Deploys flexible licensing model to scale easily and activate new functions

Rely on an operation-oriented solution

- Operates with Synamedia's Video Network Service Manager (VSM) to centralise your OTT and broadcast services
- Offers rich and documented APIs to meet all specific requirements
- Provides intuitive drag-and-drop interface to quickly configure your service
- Ensures high availability with efficient monitoring and management tools to let you focus on value-added tasks

About Synamedia Video Network Solutions

Synamedia's video network solutions enable media, web and pay TV providers to deliver pristine-quality broadcast and broadband video securely over any network to any screen. Anchored by the industry's most comprehensive processing platform and built with high-quality standards, our solutions ensure outstanding performance and reliability for over 1,000 customers worldwide. Synamedia's solution portfolio covers the entire video network chain – from distribution, through processing, to delivery – enabling you to offer outstanding value-added and personalized experiences while saving costs.

Next Steps

Learn more about Synamedia's video network solutions.

For more information, contact us.

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