

THOMSON

▶ VIDEO NETWORKS



CONVERGENT TV

A UNIQUE SOLUTION FOR WEB TV, OTT AND IPTV
SERVICE DELIVERY

Thomson Video Networks leverages on years of experience and know how in video distribution systems and compression technologies. The company thus offers an innovative convergent solution for streaming broadcast quality Internet TV alongside regular TV services. A simplified workflow process with easy service expansion capabilities makes Thomson's solution a unique, future-proof investment and a perfect response to the evolving media delivery landscape.

Content providers are facing the challenge of delivering content to a rapidly growing number of video capable handheld devices like Apple's iPad or Google's Android-based systems. Not only do content providers need to provide content to a large number of different devices but they need to do so with a compelling video experience. The response of the industry so far, has been to build separate distribution systems for IPTV, InternetTV and Mobile 3G networks.

Although this approach may appear scalable or flexible, the rapid growth in the number of workflows will soon lead to an unmanageable and costly system. With a completely different approach, Thomson's IPTV, InternetTV and OTT solution is based on an open architecture, which enables a simplified workflow as

well as the capability to address a large number of delivery formats and easy future service expansion. The Thomson Video Networks Convergent TV solution not only simplifies broadcast distribution architectures by offering true scalability, density and upgradability, but it also enables smooth workflow evolution, extending the lifespan and removing the need for forklift upgrades. The new ViBE VS7000 is scalable in terms of processing power and is thus future and feature proof. Adding new features such as TV channel branding, mosaic generation, multi-view broadcasting, new codec or new streaming formats to reach the latest cool device becomes a simple operation of seamlessly and automatically rebalancing jobs across the ViBE VS7000 processing cloud.

Capturing the Audience with Pristine Video Quality

Thomson Video Networks has a long history of delivering superior video quality for bandwidth constrained conditions such as broadcasting over satellite or terrestrial networks. The ViBE VS7000 is another example of Thomson Video Networks' commitment to compression performance excellence. Picture quality becomes crucial for the end user as the average display size

used to watch OTT content continues to grow. Delivering a high quality viewing experience certainly helps attracting an audience and makes advertising on such platform more attractive. But compression performance is also about increasing HDTV eligibility footprint on ADSL networks whether IPTV is delivered through a managed multicast network or through Adaptive Bit-Rate encoding (ABR). Compression performance through reduced bandwidth usage

also benefits to operators working with CDN companies, as transport over CDN networks is often charged per Gigabyte delivered. A lower bit-rate for a given video quality will directly translate in OPEX savings.



KEY BENEFITS

- › Superior picture quality for all screens, from smartphones and tablets to smartTVs
- › Flexible distribution solution for simultaneous delivery to IPTV, Mobile phones, tablets & PCs
- › Easy integration with other subsystems such as CDNs, CAS, DRM
- › Full automatic redundancy management across complete system
- › Versatile architecture with smooth upgrade path to future compression or streaming formats
- › Easy workflow customization and service provisioning
- › Scalable from 1RU server to multiple blade server chassis



A Solution for All Screens, All Networks

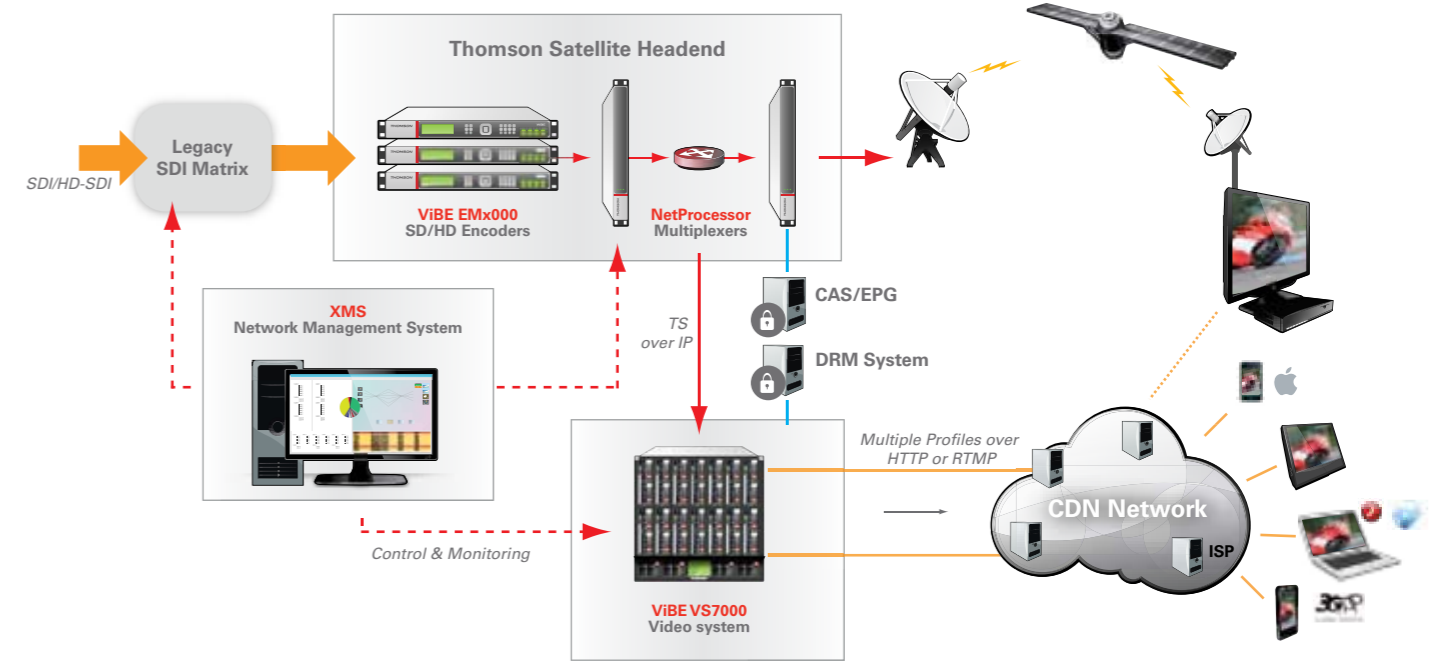
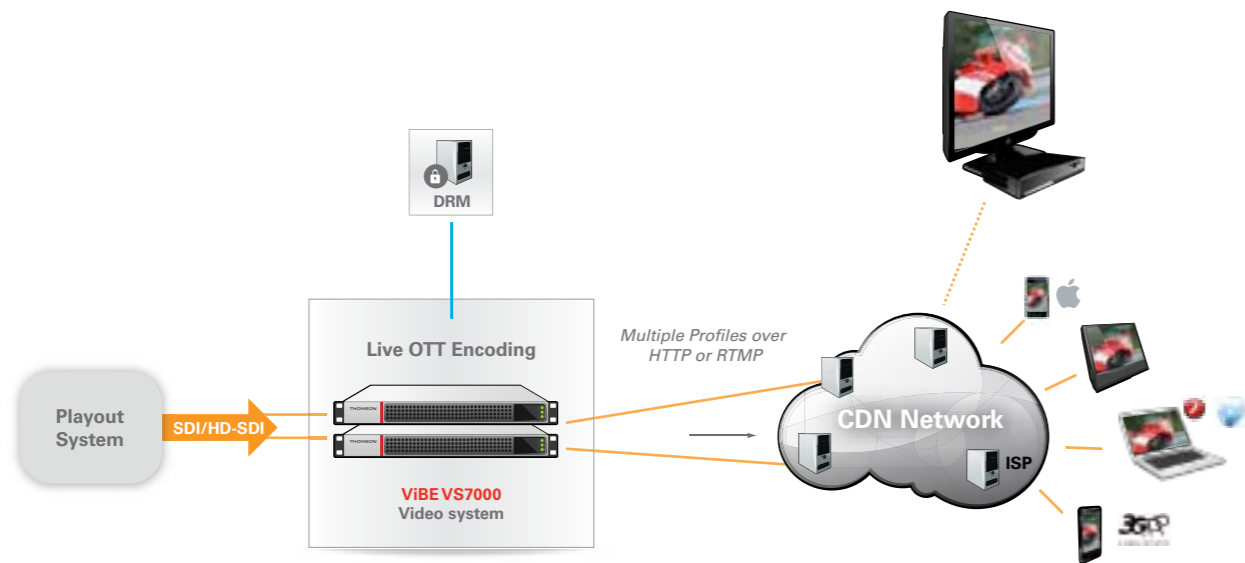
The Thomson Video Networks solution allows operators to use a single compression distribution platform to format live content for delivery to all types of connected devices over any managed or unmanaged IP networks. Legacy architectures have relied on dedicated video encoders for IPTV, Mobile TV, and InternetTV. With the Thomson Video Networks solution, a live video channel enters the distribution system and then is processed to generate as many output formats as necessary to comply with users' devices and delivery networks. Video de-interlacing,

resizing, compression profiles, network encapsulations are all optimized to ensure best viewing experience whether the user has a mobile phone, tablet, smart TV, or an IPTV set top box.

OTT Solution for Broadcasters or Content Providers

Broadcasters or content providers may have different motivations for delivering their linear channels to the Internet but developing brand awareness is key to most broadcasters. As people are spending more time on new screens such as PC, smartphones or tablets, it is important for broadcasters to be present on these new screens. However,

monetizing the service for just a few channels is not such an easy thing to achieve. Broadcasters need to partner with CDN companies to deliver their signal to Internet users, which comes at a cost. So the Thomson Video Networks solution for broadcasters offers an easy integration in the broadcaster workflow thanks to being pre-integrated all major CDNs in addition to relay on a high performance encoder to provide an attractive viewing experience while at the same time saving cost on CDN delivery.



OTT Solution for PayTV Operators

PayTV operators benefit from a long experience of aggregating and selling bouquets of programs to subscribers. Today, with a better broadband access and more connected devices in their home, subscribers want the same experience they get on their living room TV, on their PC, tablet or even on their smartphone. PayTV operators are in a good position to offer this service as they already master the bouquet and associated content licensing. The simplest way to add OTT channels in a DTH distribution system is to route the satellite signals directly to a ViBE VS7000, which will convert all channels to OTT formats

and upload them to a CDN for broadband delivery with the same compression performance as one can enjoy with satellite distribution. Delivering high-value content to a tablet or PC requires the same level of content protection and access control as one that can be found on the satellite platform. This is easy to achieve with the ViBE VS7000 scrambling solution and an external DRM system as the ViBE VS7000 is pre-integrated with major DRM vendors. Automatic redundancy can be managed separately, internally to the ViBE VS7000 or can be simply integrated into the Thomson XMS supervision system if already installed in the satellite headend.



ViBE VS7000
Video System



MULTI-NETWORK CONVERGENT TV SOLUTION

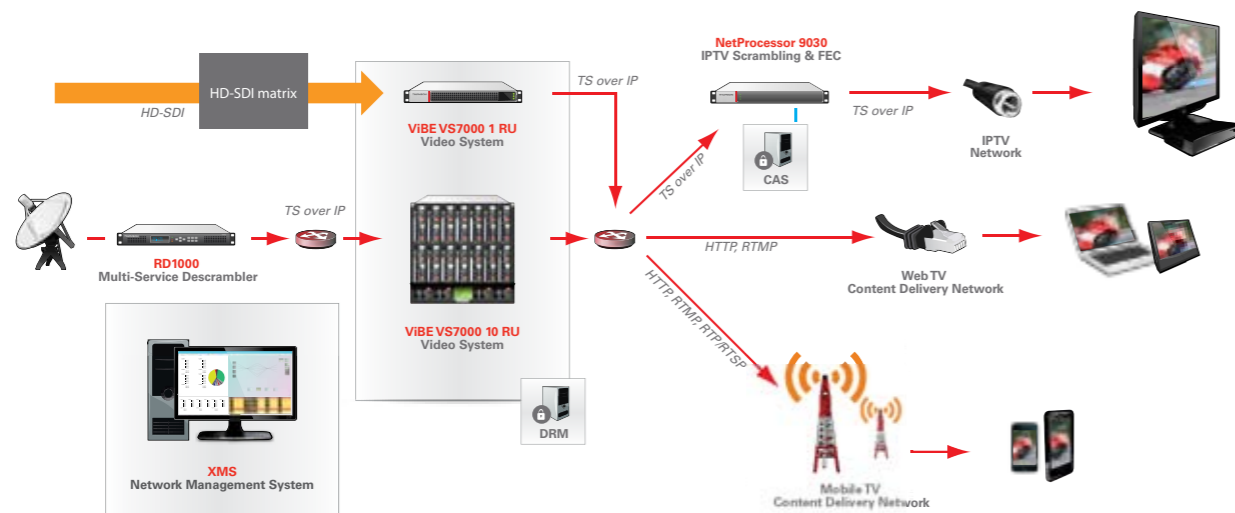
IPTV and OTT

Convergent Solution for Telcos

Telecom operators have over the last decade deployed broadband and IPTV services and are now faced with the challenge of deploying OTT services while maintaining or upgrading their first generation IPTV deployment to improve compression bitrates and increase eligibility on ADSL networks. Thomson's ViBE VS7000 system permits operators to improve their IPTV eligibility and to

also add OTT services (while maintaining excellent video quality on 3G networks) so that subscribers can watch their IPTV package on tablets or PC. For managed IPTV, the ViBE VS7000 can be interfaced seamlessly with the existing compression distribution system and can also scramble all streams internally (AES). In some cases an external Thomson NetProcessor 9030 can complement the solution for DVB CS scrambling and add FEC protection

to all IPTV streams in order to guarantee excellent viewing experience over ADSL networks in noisy environments. For unmanaged IP networks distribution, stream segmentation and adaptive streaming encapsulations are natively supported by the ViBE VS7000, which makes delivery to popular smartphones and tablets possible.



ORDERING INFORMATION

Please contact your authorized Thomson Video Networks representative for more information. Each component of the ConvergentTV Solution is also available separately.

SPECIFICATIONS

Please visit www.thomson-networks.com for detailed product information and specifications for each component of this solution.

PROFESSIONAL SERVICES

Our professional service offerings ensure optimal system performance and maximized uptime. These services include call centers staffed 24/7; system planning, design and commissioning; professional training courses; and technical maintenance programs and service agreements.



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