



VCAS™ FOR BROADCAST HYBRID

Broadcast Hybrid Video Delivery in a
Single Security Solution

MANAGE SECURE VIDEO DELIVERY OVER BROADCAST, MULTICAST AND OTT NETWORKS

THE CHALLENGE

As operators transition from a broadcast network to a multi-network service, they must continue to handle the technical and commercial factors involved in growing such a business:

- Consumers' expectation of a high-quality TV Everywhere experience in which they can access content in a seamless manner
- Rights management across RF linear, multicast linear and streamed on-demand content; mix of protocols and bitrates
- Transition from hardware centric approaches to software and IP-based technologies

Successfully managing this vastly expanded scope of delivery challenges is critical to remaining competitive. Verimatrix offers optimum support for operators advancing beyond silo-based, single network content protection and helps move them into a world of multi-network revenue security.



FARNCOMBE™ SECURITY AUDIT	
Company	VERIMATRIX
Product	VCAS FOR BROADCAST-HYBRID
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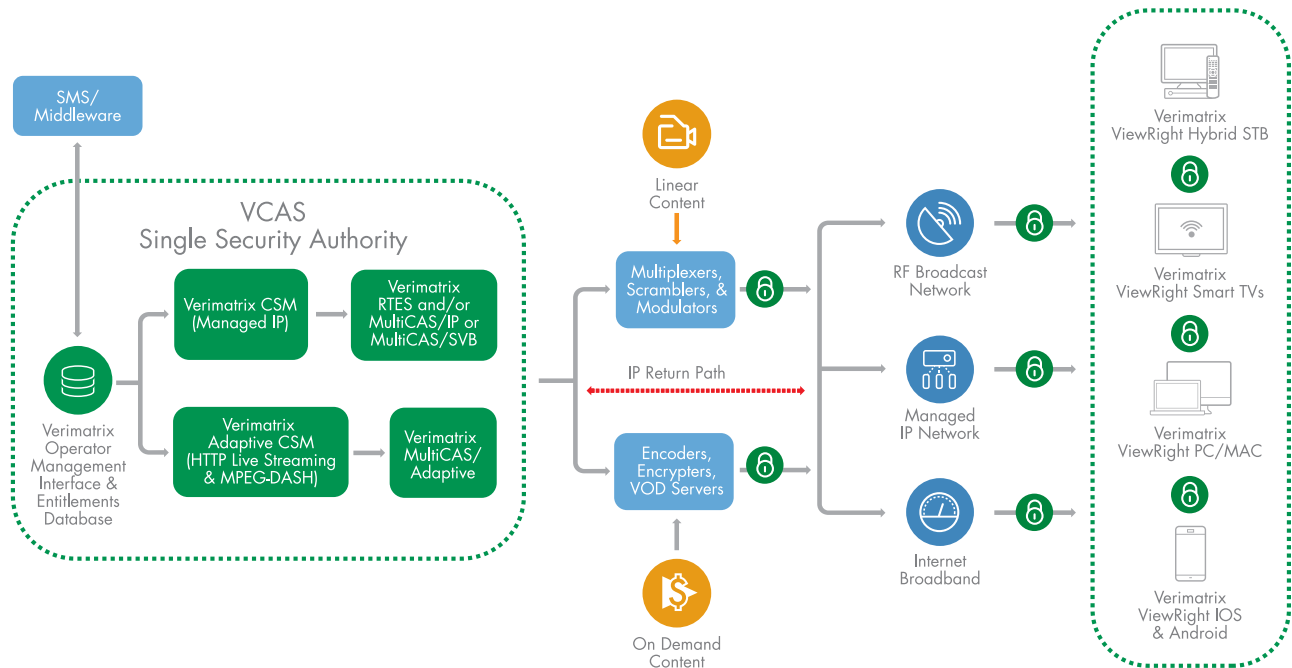
THE SOLUTION

Combining sophisticated security technology with intuitive user interfaces, the VCAS for Broadcast Hybrid provides a single source for rights management across RF linear, multicast linear and on-demand content. This enables viewers to enjoy the ideal, seamless multi-screen experience. In addition to its Farncombe audit, VCAS for Broadcast Hybrid has been proven effective in the field for its key benefits:

- Scalable software and IP centric architecture with flexible configurations to support on-premise, cloud or mixed deployment models
- User-specific watermarking technology (VideoMark®) in line with MovieLab requirements and supporting UHD/4K service delivery
- Extended monitoring and management capabilities using Verspective™ add-on service

Due to the system architecture and compact form factor, VCAS is inherently cost-effective for the smallest deployment while field-proven to scale efficiently for tier 1 payTV operators with millions of subscribers.

VCAS™ FOR BROADCAST HYBRID SYSTEM ARCHITECTURE AND KEY COMPONENTS



- **Operator Management Interface (OMI)** – The core administrative component of VCAS, the OMI provides a single VCAS integration point for customer care, billing and middleware systems through a set of content, device and entitlement management interfaces.
- **Content Security Manager (CSM)** – Contains the VCAS security components for managed IPTV networks to support authentication, key distribution and user control. CSM scales cost effectively to meet any deployment size by distributing components across clusters of servers and database engines.
- **Real-Time Encryption Server (RTES)** – Performs 128-bit AES encryption of multicast Single Program Transport Streams (SPTS) of encapsulated video content per DVB standard.
- **MultiCAS™/IP** – An alternative to RTES, MultiCAS™/IP generates ECMs in conjunction with third-party, hardware-based AES scramblers supporting Simulcrypt.
- **MultiCAS™/DVB** – Generates ECMs in conjunction with third-party Simulcrypt capable multiplexers/scramblers. The scrambling algorithm is typically DVB-CSA. MultiCAS/DVB also supports the EMMG interface, which is used for certain user and device messaging.
- **VOD Encryption Manager (VEM)** – Performs faster than real-time AES-128 pre-encryption of VOD assets, in conjunction with CSM and third-party VOD servers, supporting manual or automated workflow.
- **ViewRight® STB for Broadcast-Hybrid** – A robust package of embedded code that implements VCAS cardless security functions within each IP-STB including broadcast-hybrid, DVR and connected/smart TV. An integral part of ViewRight ONE, it offers best-of-breed content security for two-way networks in a hardened implementation that utilizes the sophisticated security features of modern STB chipsets.

ABR Components enabling Broadcast-Hybrid support:

- **Adaptive Content Security Manager (ACSM)** – VCAS security components for networks implementing HLS or DASH based OTT services. ACSM supports authentication, key distribution and user control and acts as the root Certificate Authority in a PKI hierarchy.
- **MultiCAS™/Adaptive** – MultiCAS/Adaptive integrates high-performance third-party AES scramblers with proven VCAS key management functions to encrypt steaming video.
- **ViewRight® Web** – An integral part of ViewRight ONE, the web clients implement security features to protect content in off-the-shelf CE devices enabled for HLS/DASH for various platforms, including iOS, tvOS, Android, Windows PC, macOS, smart TVs and STBs, etc.

ABOUT VERIMATRIX

Verimatrix specializes in securing and enhancing revenue for multi-network, multi-screen digital TV services and is recognized as the global number one in revenue security for connected video devices. Its award-winning Video Content Authority System (VCAS™) solutions enable video service providers to cost-effectively extend networks and enable new business models. www.verimatrix.com



EUROPE, MIDDLE EAST, AFRICA HQ

Verimatrix GmbH
Fraunhoferstr. 7
85737 Ismaning, Germany

Tel: +49 89 55265 100 | Fax: +49 89 55265 101

GLOBAL AND AMERICAS HQ

Verimatrix, Inc.
6059 Cornerstone Court West
San Diego, CA 92121 USA

Tel: +1 858 677 7800 | Fax: +1 858 677 7804
www.verimatrix.com | info@verimatrix.com

ASIA PACIFIC HQ

Verimatrix Singapore
101 Thomson Road
#22-01A United Square, Singapore 307591

Tel: +65 6353 9430 | Fax: +65 6252 5185