

## Description

The Verimatrix Content Security Manager (CSM) is the core component of the most advanced software-based content security system available – the Verimatrix Video Content Authority System (VCAS). CSM enables and supports all features and options within a VCAS secured pay-TV system, including broadcast/multicast only, VOD only, or hybrid broadcast and VOD network deployments with secure, real-time key distribution for the full spectrum of content services. CSM is also equipped to support deployment of advanced interactive pay-TV features such as PVR and nPVR in conjunction with other head-end components. CSM acts as the root Certificate Authority in a PKI hierarchy, using X.509 certificates to validate and authorize all content protection communication within the pay-TV network. This includes messaging between VCAS sub-system components as well as between the head-end system and authenticated client STBs and PCs in subscriber households.



## Features

Platform OS	Solaris 10, Linux (RHE v4/5)
Sub-system interfaces	Authenticated via PKI and X.509 digital certificates
Database support	Oracle (9i, 10g)
GUI	Flexible Java-based administrative interface
Event logging	Comprehensive and secure
Implementation	Single machine or distributed load balanced cluster
Middleware interface	XML-RPC entitlement interface works in push or pull model compatible with multiple middleware packages
Network Management	SNMP
Scalability	From trial system to 1+ million subscribers and beyond.

Implementations of CSM can be cost effectively scaled to meet any scale of operator deployment by distributing system components across clusters of servers and database engines, using load balancing and fail-over support for each mission critical component. Interfaces to middleware packages are flexible and lightweight, with both push and pull models for access to subscriber entitlement data.



## VCAS

The Verimatrix Video Content Authority System (VCAS™) offers an advanced suite of technologies that address content security challenges for the networks of today, and those of the future. Traditional conditional access systems are architected around one-way communications, while Verimatrix has designed its solutions from the ground up using the power and elegance of modern two-way IP infrastructure. Cryptographic and e-commerce technologies proven on the Internet enable VCAS to offer a more sophisticated level of content protection than traditional smartcard-based systems.

VCAS incorporates pioneering features that provide the best security perimeter of any content protection system, enabling complete transparency for legitimate content consumption while significantly raising the level of protection against content piracy.

VCAS security has received very favorable results in independent audits and is the approved security choice in pay-TV operator deployments on a worldwide basis. As the global leader in software-based security, VCAS offers flexibility in choice of client devices, broad middleware interoperability and proven scalability.

## Features

Platform OS	Solaris 10, Linux (RHE v4/5)
Video codecs	MPEG-2, H.264, VC1, DivX
Video encapsulation	MPEG-2 TS
Encryption	128bit AES, 128bit RC4, 1024 bit PKI (2048, 4096 optional), DVB-CSA
Digital certificates	X.509 compliant
Network management	SNMP
Database support	Oracle (9i, 10g)
Content ingestion	Manual or automatic
Head-end integration	XML-RPC, SOAP, DVB-Simulcrypt
Clone detection	Patent-pending GeoAuthentication & QuantumID options

## Verimatrix—Securing Content, Enhancing Entertainment

Verimatrix sets the standard for software-based content security and revenue enhancement technologies in pay-TV networks, with a global customer base of telecommunications providers. VCAS offers a suite of next-generation technologies that protect content and enhance revenue streams, while combating digital piracy wherever it occurs within the distribution chain. VCAS has been consistently highly rated in independent audits with zero security exposures.

The company's content security experts maintain close relationships with the major studios and broadcasters to help address the challenges facing the pay-TV networks of today, and those of tomorrow. Verimatrix's customers benefit with most favorable access to premium content, enabling the richest, most versatile viewing experience for their digital video subscribers. For more information, please visit [www.verimatrix.com](http://www.verimatrix.com)

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