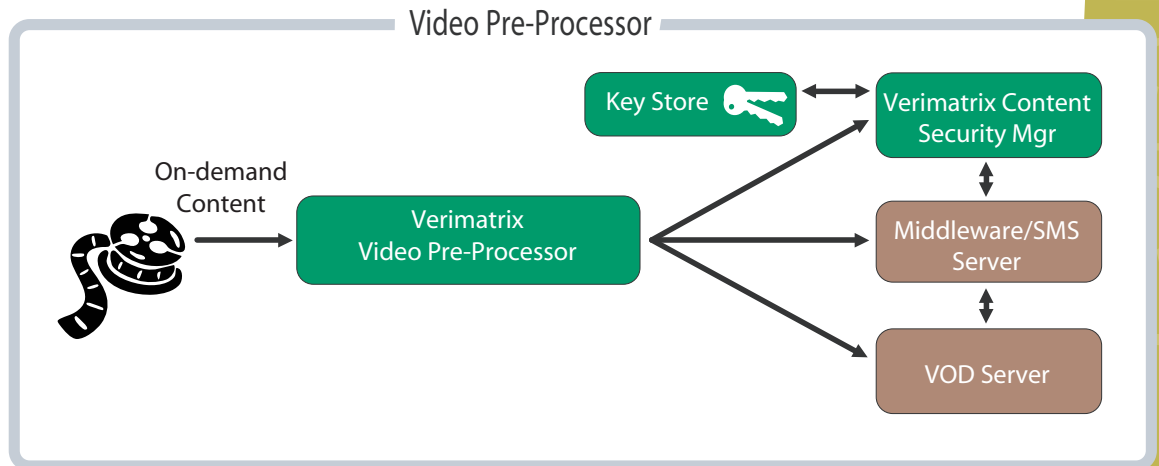


Robust, Flexible Offline Encryption of Video Assets

The Verimatrix Video Pre-Processor (VPP) component of the Video Content Authority System (VCAS) provides an integrated and highly flexible mechanism to generate encrypted content files in preparation for VOD delivery. VPP supports automation of the content ingestion process from receipt of intermediate files and meta-data, through optional watermark insertion to provisioning the VOD server and subscriber entitlement system. The integration of VPP provides an efficient and robust operational front-end for a wide range of added-value pay-TV services.

Working with the Verimatrix Content Security Manager for key generation, VPP encrypts video assets using proven AES or RC4 algorithms, which can be applied at an operator specific percentage level. Verimatrix has architected a fully MPEG-aware video encryption process to enable preservation of key header fields while supporting the widest range of indexing utilities that facilitate trick play functions. The use of MPEG transport stream and DVB standard ECM formats enable secure insertion of a flexible range of control data within each stream, including copy control, watermarking management, service class and content ratings ("parental control") data.



Features

Platform OS	Solaris 10, Linux (RHE v4/5)
GUI	Java based
Stream format	IP encapsulated MPEG-2 TS
Content encryption	128bit AES, 128bit RC4
Key mutation rate	Operator selectable per stream, up to 2/sec
Stream encryption	Operator selectable from 1-100%
Trick-play/DVR support	I-frame and header detection/protection ready for trick play stream indexers
Automation capability	SOAP API support for workflow management
Scalability/Redundancy	Clustering and auto-failover support

VPP employs encryption and key management protocols which are symmetrical to those used by the RTES and MultiCAS broadcast encryption components of VCAS. This approach improves the flexibility of system configurations that can be deployed and offers near seamless support for PVR and nPVR functions.