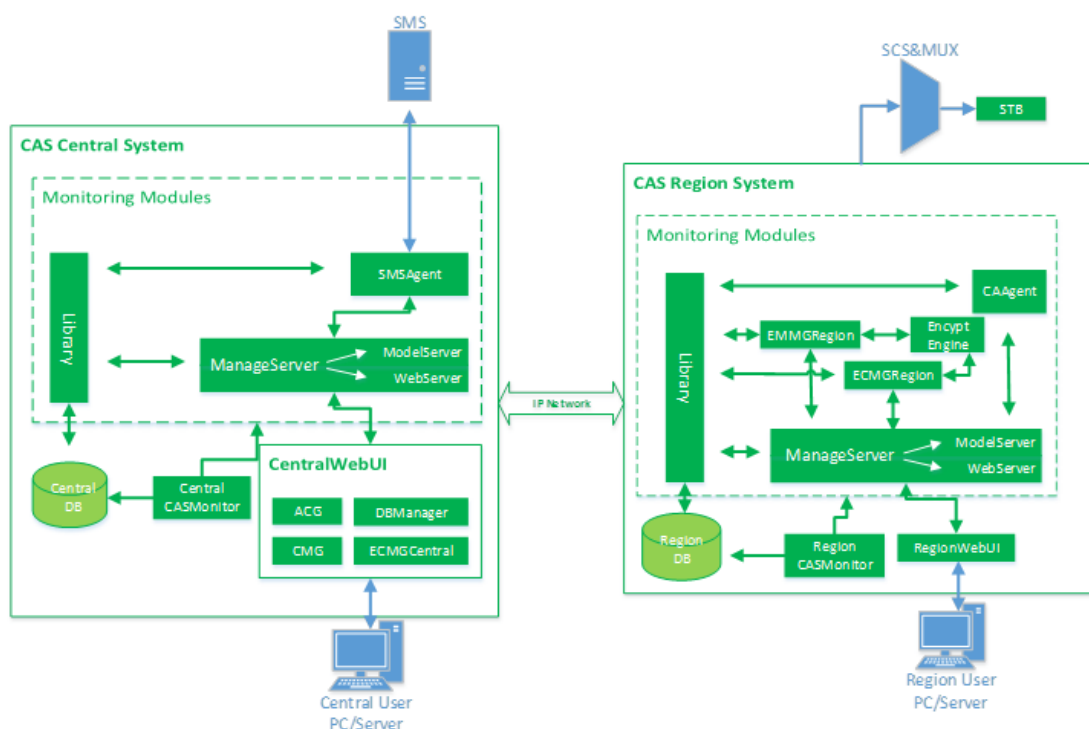# GOSPELL VisionCrypt®

A Conditional Access System for Distributed Deployment

Product Overview

GOSPELL VisionCrypt is a turn-key security solution for content provider and broadcast operator of CATV, DTT and DTH. It supports a centralized or distributed deployment, when it was deployed in large scale pay TV network in wide geographic areas, one central CAS and several remote CAS will be required and connected, all remote CAS can be governed and monitored by central CAS.

GOSPELL VisionCrypt CAS was designed to provide a completely secure content environment for broadcast operators. It can encrypt control words and user authorization information within a stable and highly secured environment, and fully compatible with DVB Simul-Crypt standard. GOSPELL CAS has been examined and approved by SARFT with millions of subscribers and has awarded by Class A network access license. Meanwhile, it has passed India BECIL certificate.

GOSPELL VisionCrypt CAS supports a number of mechanisms of content protection enabling better operator investment, such as 3DES and AES encryption algorithm, smart card & STB binding, zone control, fingerprint, dual-level encryption and smart card distribution and etc.

## Features & Benefits:

Industry-leading Security

- 3DES/AES Encryption and Smart Card/STB Pairing

Adopt industry leading 3DES/AES encryption algorithm, secure key management and dynamic distribution mechanisms in headend software system. Control word messages are uniquely encrypted, and they can only be decrypted by the authorized STB which is paired to smart card. This unique pairing between the STB and the CA client ensures that specified contents can only be received by the intended STB.

- Dual-level smart card encryption/distribution from CAS vender and operator, both control words and sensitive data are encrypted and sent to smart card.

- Smart Card-STB- Network-Operator binding, preventing Smart Card & STBs from roaming

- Smart card white-list control, prevent illegal STB usage

- PIN code protection

- Secured SMS access control and encrypted communication interface between SMS and CAS

- Authorization, de-authorization, pre-authorization

Anti-Piracy Mechanisms

- Customized smart card chip with GOSPELL patented COS, prevent tampering and reverse engineering of Smart Card
- Covert and overt fingerprint protection
- Encrypted communication interface between SMS and CAS
- PVR recording and authorization control, preventing contents from pirate

Pay-as-you-grow Deployment and Flexible Business Model

GOSPELL VisionCrypt CAS supports a centralized or distributed deployment, system redundancy and load balancers can be deployed according to network scale requirements of operators, this enables pay TV operators can smooth deploy a small or medium-size initial deployment and to be able to expand this to a large scale deployment in wide geographic areas, regardless of if this is cable, satellite or terrestrial.
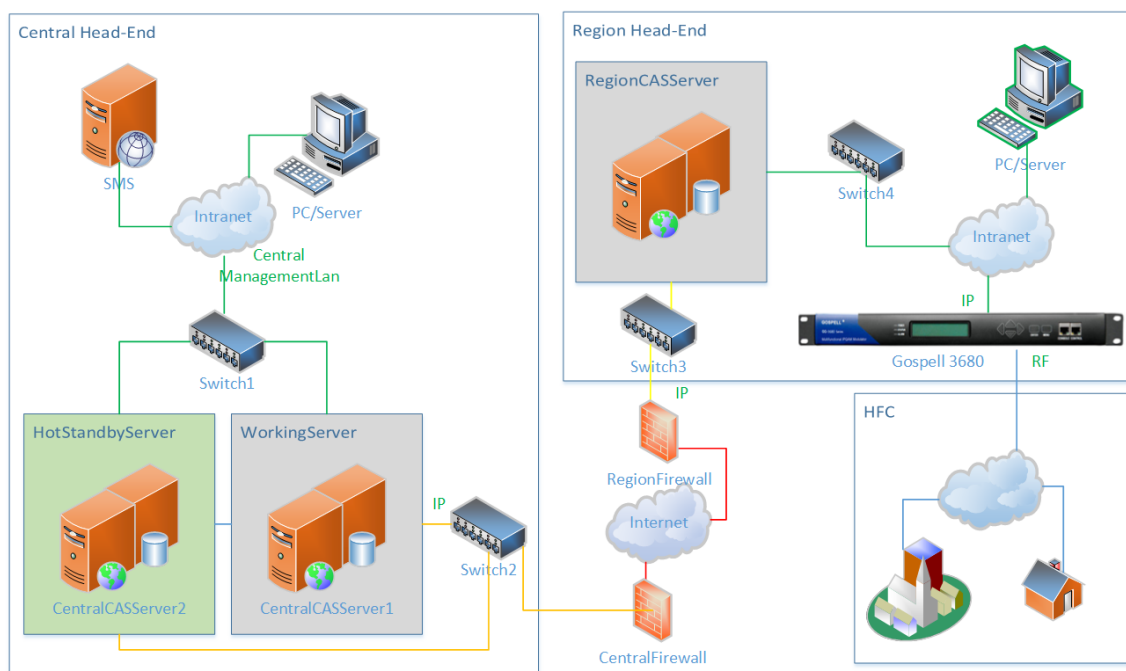
GOSPELL VisionCrypt CAS provides robust content security protection for pay-TV operations, and also supports multiple payment options, that can help operator to improve Average Revenue per User (ARPU).

- Subscription
- Impulse Pay-Per-View (IPPV)
- Impulse Pay-Per-Time (IPPT)

Long-Term Security Updates and Upgrades

GOSPELL security team is always keeping on researching security technology to make sure GOSPELL CAS updated with high security protection. To protect content provider and operator investments, GOSPELL VisionCrypt CAS offer real-time security updates and upgrades, this enables operators to remotely fix security breaches on headend CA software and smart card through over the air (OTA) in the event of a piracy incident. In case of security broken, we may take below countermeasures to cope with security threats from both CAS server and STB sides:

↻ Update Security Key

In case the smart card security key is discovered, GOSPELL security team will update the key for data communication and also change the key in smart card.

↻ Upgrade Encryption Algorithm

In case there is hacking for our encryption/decryption algorithm, security team also can upgrade the CAS and (or) smart card encryption/decryption algorithms.

↻ Upgrade Card Chip

In case of current card chip was hacked, GOSPELL security team can upgrade both smart card COS and chip, including related security key and algorithm.

↻ Change Smart Card

As a backup solution, GOSPELL will change smart card for operator if fail to secure content security and all other countermeasures have been fully exhausted.

GOSPELL CAS is designed to support smooth and secure upgrades, it will not affect existing operator business.

Versatile Functions

- Parental Rating, On-Screen Display (OSD) and broadcast/conditional mail
- Conditional prohibition and permission play
- Forced channel switch, designated start-up channel
- Automatic expiration of authorization, viewing time control
- Supports basic subscriber and smart card issue management
- Flexible authorization management, up to 1000 product packets with unrestricted combination
- Dynamic Access Criteria (AC), one service may belongs to different product package
- Comprehensive log management and system monitoring

Cost-Effective

GOSPELL is not only a leading CAS solution provider, but also the Top 5 STB manufacturer in the world.

Furthermore, GOSPELL can provides a complete DTV turnkey solution, enabling the operator additional benefits in dealing with just one company, therefore minimizing the amount of overall investment and system integration work needed.

This one-stop solution can significantly help broadcast operators reduce up to 60% of pay-TV security expenses relay on GOSPELL cost-effective hardware manufacturing, distribution, management and operation costs.

For More Information

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