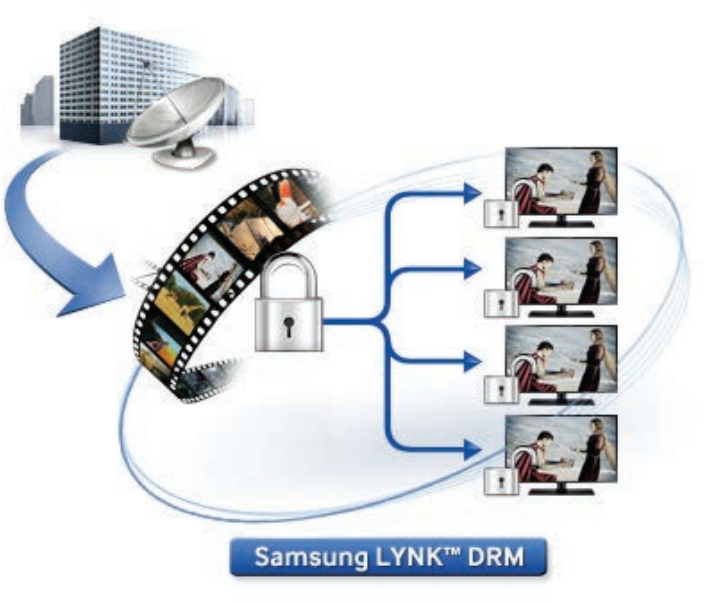
Samsung LYNK™ DRM

Digital rights management solution for easier, more effective security



Highlights

- Maintain the security of digital content with greater ease and efficiency through a software-only solution
- Reduce the overall cost of providing premium TV content security management
- Implement more powerful security through a software-based solution

Provide premium TV content more efficiently

Hospitality industry property managers need a cost-effective way to maintain the security of premium High-Definition TV (HDTV) content, such as cable, satellite and video-on-demand (VoD) programming.

Broadcasting signals sent from content providers to end user devices (for example, set-top boxes [STBs] or TVs) should be encrypted to protect the copyrighted content. The Samsung LYNK Digital Rights Management (DRM) protection area is the section between a headend (video server distribution hardware) or server and the client device.

The Samsung LYNK DRM solution is designed so that, with the purchase of a Samsung LYNK DRM license, resellers or system integrators can quickly and easily apply the solution to their systems. Because Samsung LYNK DRM is fully software-based, it is easier to implement and manage than hardware-based solutions.

Samsung LYNK DRM is verified by the Digital Transmission Licensing Administrator (DLTA) and is aligned with industry security standards.

Samsung LYNK DRM is a software-based digital conditional access system (CAS) solution that can be ported on the main chip of a TV. The solution requires no additional chipset purchase. Samsung LYNK DRM protects interactive Internet Protocol television (IPTV) and non-interactive (cable) digital audio and video content.

Reduce overall system component expenses

Increase premium TV content security with a robust software solution

Improve the ease and efficiency of securing digital content and provide faster recovery of CAS problems through a pure software implementation solution. The following Samsung LYNK DRM software characteristics provide quicker, easier content security maintenance:

- The software can be updated through firmware
- Variable encryption keys are automatically changed periodically, which enables Samsung LYNK DRM to provide more powerful security functionality
- The key renewal does not require TV, STB or headend replacement

Avoid additional hardware upgrade costs

Samsung LYNK DRM is a hardware-independent solution that reduces Bill of Material (BOM) or overall premium TV component costs. This solution is less expensive, more flexible and easier to manage than hardware solutions because it can be ported onto most TVs or headend devices.

The ability to upgrade to the Samsung LYNK DRM is most valuable when encryption key content is compromised. A person who possesses an encryption key can decrypt and steal video content from anywhere between the headend and TV set. When this occurs with a system that has hardware-based encryption technology, the entire set of headend and TV cards or chipsets must be replaced. Replacing the hardware results in an unexpected expense to the customer. Samsung LYNK DRM adapts to various headend and STB manufacturer products with a high degree of flexibility.

Take advantage of a new, more powerful premium content security solution

Most industry-standard digital content security solutions require cards or chipsets for headend and TV hardware. Because these solutions are hardware-based, resolving issues is difficult. Additionally, while the hardware issues are being addressed, the customer is inconvenienced by the inability to view digital TV content.

By comparison, Samsung LYNK DRM is a software-based solution. When the system encounters a problem or an encryption key is leaked, a system administrator can fix the issue and restore service with less time and effort.

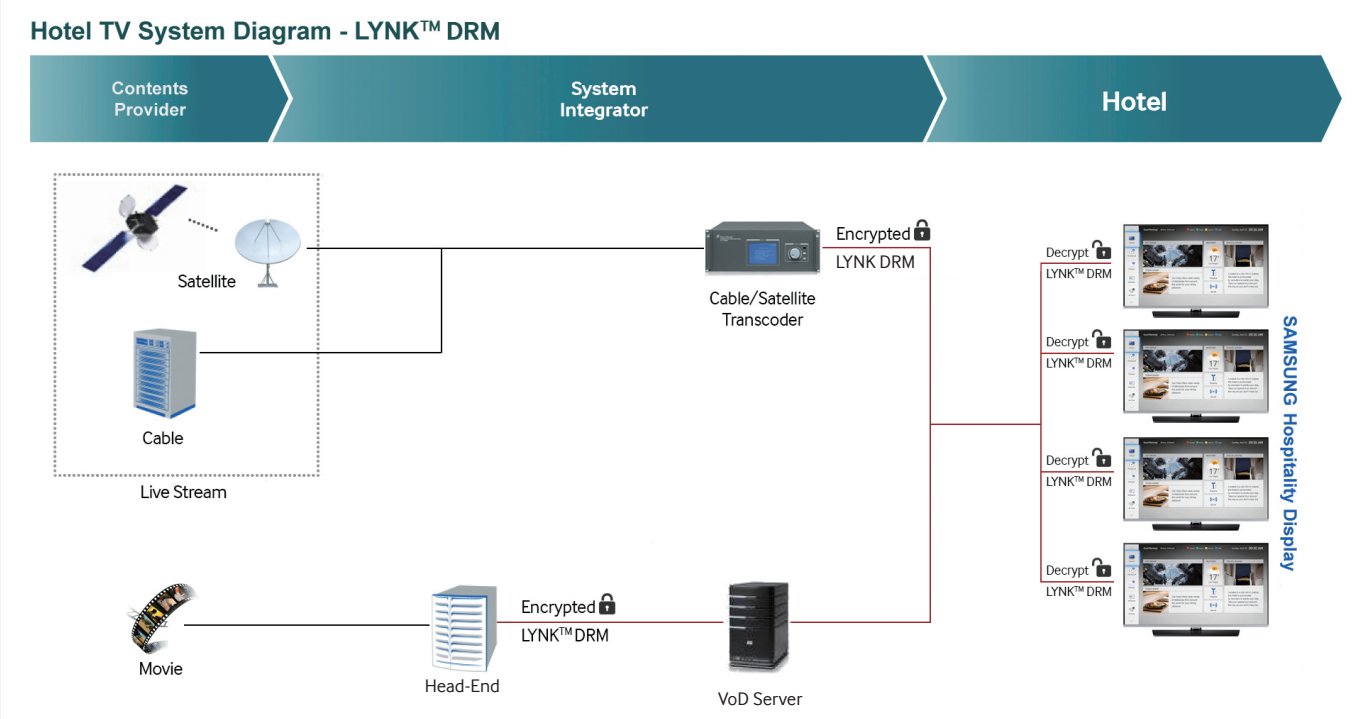


Figure 1. Samsung LYNK DRM provides powerful security functions with more flexibility.

Samsung LYNK DRM

Headend system requirements

	Requirements
Hardware	Support for greater than 1 GHz CPU Support for greater than 512 MB RAM Support for greater than 1 GB HDD or flash drive
Software	Support for Simulcrypt Protocol (Chapters 4, 5 and 6 of Digital Video Broadcasting (DVB) Simulcrypt Specifications) Support for Advanced Encryption Standard-Cipher Block Chaining (AES-CBC) without padding for encrypting data payloads of audio or video Support for Apache Tomcat™ and Java® Support for SQLite®, PostgreSQL® or MySQL™

TV or STB system requirements

	Requirements
Hardware	Support for greater than 600 GHz CPU Support for greater than 512 MB RAM Support for greater than 1 GB HDD or flash drive
Software	Support for Simulcrypt Protocol (Chapters 4, 5 and 6 of DVB Simulcrypt Specifications) Support for AES128-CBC encryption without padding Support for hardware descrambling Support for secure storage

TV or STB operation

	Requirements
Step 1.	The client uses the output value as the conditional access (CA)_system_ID to identify the Samsung LYNK DRM from other CA vendors.
Step 2.	The client parses the Moving Picture Experts Group (MPEG) transport condition access table (CAT) to ascertain the CA_ portable image display (PID) from the CA_descriptor.
Step 3.	The client filters the transport stream for the CA_PID associated with the program and feeds the CA_PID expanded memory manager (EMM) to the Samsung LYNK DRM.
Step 4.	The client parses the MPEG transport program map table (PMT) to ascertain the CA_PID from the CA_descriptor.
Step 5.	The client filters the transport stream for the CA_PID associated with the program and feeds the CA_PID electronic content management (ECM) to the Samsung LYNK DRM.

Legal and additional information

About Samsung Electronics Co., Ltd.

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For more information

For more information about Samsung LYNK DRM, visit www.samsung.com/business or www.samsung.com/displaysolutions

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2014-05