ARRIS MultiTrust™
Advanced Rights Manager

Total control and complete flexibility in managing and securing content

PRODUCT OVERVIEW

ARRIS MultiTrust™ Advanced Rights Manager is a Pay-TV management platform that bridges ARRIS Titanium CAS, ARRIS SecureMedia® and multiple industry standard DRM technologies within the same head-end. ARRIS MultiTrust™ Advanced Rights Manager has been designed with extensible head-end architecture, allowing multiple content protection technologies to be managed from a single set of interfaces. This provides significant operational savings by limiting the number of integrations to back-office management systems. With the ability to introduce additional security mechanisms without impact to existing services, ARRIS MultiTrust™ Advanced Rights Manager provides comprehensive recovery and migration options for long-term future proofing.

ARRIS MultiTrust™ Advanced Rights Manager provides advanced subscriber and content modelling interfaces that enable operators to greatly simplify the management of rights. By providing a bridge between the business and technology domains, ARRIS MultiTrust™ Advanced Rights Manager enables the operator to continue managing their Pay-TV business of subscribers, clients and entitlements, while abstracting the complexity of licenses and content owner mandated DRM business rules.

In order to deliver Advanced Rights Management, ARRIS has implemented a subscriber and content model, which enables operators to manage security in the same way as they sell content, specifically:

- ARRIS MultiTrust™ Advanced Rights Manager enables the operator to define the connected home and the devices it comprises.

- Policies can be defined by creating rules, which are consistent with the way in which packaged content is sold regardless of the device on which it is consumed. Restrictions for content consumption may also be defined per device type if required.

- ARRIS MultiTrust™ Advanced Rights Manager creates a single security platform enabling a definitive source for content usage reporting in the Pay-TV platform.

Subscriber Modelling

ARRIS MultiTrust™ Advanced Rights Manager allows an operator to model 'The Customer' and not simply manage devices. Operators can define 'The Customer' and the devices on which they are authorised to access content then simply grant the Rights that the customer has purchased. Advanced Rights Management ensures that the correct Entitlements or DRM licenses (across multiple DRMs simultaneously) are delivered to the appropriate devices.

Content Modelling

The content model is equally flexible and introduces the concept of Policy, allowing an operator to define how a package of content can be consumed by the user. The ARRIS MultiTrust™ Policy Engine then implements this on devices by mapping to the supported DRM Rules of any deployed DRM system such as ARRIS SECUREMEDIA®, Microsoft® PlayReady®, Google Widevine™ or Apple® FairPlay. Similarly, on the set-top the ARRIS MultiTrust™ Policy Engine maps the Policy to a CAS entitlement. This approach offers an operator a powerful and flexible approach to controlling content Rights while maintaining the simplicity of traditional CAS environments. Rights for all subscriber devices are granted by simply provisioning a single Entitlement to the subscriber account. Restrictions for content consumption may also be defined per device type if required.

ARRIS MultiTrust™ Policy Engine

The ARRIS MultiTrust™ Policy Engine maps the operator configured security policy for a Package to a set of DRM and CAS Rules which are then applied on the various types of deployed devices when a subscriber purchases a Package of content.

This enables an operator to consistently apply security and simplifies audits and reporting of content usage as required by content owners.

Modular Extensible Architecture

ARRIS MultiTrust™ Advanced Rights Manager follows ARRIS's modular architecture that allows components to be added to the system to add features without replacing or duplicating components that may have been previously deployed.

DRM components such as the License Controller can be added to an existing ARRIS TITANIUM CAS Broadcast or ARRIS TITANIUM CAS Connected head-end. Existing subscriber data and services do not need to be duplicated to a parallel security solution. And vice-versa, ARRIS MultiTrust™ Advanced Rights Manager can be deployed as an OTT only DRM based security solution, and then expanded to support CAS and ABR streams on a set-top.

The modular nature of this architecture also extends to enabling multiple DRMs to be introduced within the same ARRIS MultiTrust™ Advanced Rights Manager deployment. This allows operators to benefit from the widest range of device support while limiting the integration with their back-office systems to a single ARRIS MultiTrust™ set of APIs.

The following is a brief outline of the security technologies that ARRIS MultiTrust™ Advanced Rights Manager supports today.

ARRIS TITANIUM CAS

ARRIS TITANIUM CAS was the world's first secure, downloadable, fully DVB® compliant "Software" Conditional Access System designed for Pay-TV broadcast networks over cable, satellite, digital terrestrial and IP networks. TITANIUM CAS uses the latest security techniques to protect valuable content and revenue of Pay-TV operators without the use of smartcards. This offers significant technical, commercial and operational benefits over smartcard based systems.

Additionally, when ARRIS TITANIUM CAS is deployed in a 2-way enabled set-top, ARRIS MultiTrust™ is also able to deliver TITANIUM CAS protected content over MPEG-DASH simplifying both the set-top software stack and the content delivery network.

ARRIS SECUREMEDIA

ARRIS SECUREMEDIA® is the award-winning content security system for encrypted distribution of digital content over IP networks. The standards-based, open platform software protects digital media through production, distribution and consumption on the widest array of devices and platforms, enabling new OTT and TV Everywhere opportunities for content owners and operators.

ARRIS

ARRIS SECUREMEDIA® supports and protects premium video playback of set-top boxes, home gateways, iOS devices, Android™ tablets and smartphones, connected TVs and Blu-Ray™ players, streaming media players and devices, game consoles and computers: PC and Mac®.

Industry Standard DRM Technologies

ARRIS MultiTrust™ Advanced Rights Manager ensures operator control over and freedom to change and evolve their security solutions. This is achieved by supporting Industry standard native clients allowing operators to leverage security support inherent to the device platform. ARRIS MultiTrust™ supports:

- Apple® FairPlay
- Google Widevine™
- Microsoft® PlayReady®
- PC/MAC® browsers supporting HTML5/EME functionality

Recovery and Migration Options

Recovery

Should a DRM system be compromised, then suppliers such as Microsoft® with its PlayReady® DRM will apply their own hack recovery mechanisms, and new DRM server and client components can be deployed updating the ARRIS MultiTrust™ Advanced Rights Manager to operate with the new version. Such a change would be transparent to the operator's components.

For both set-tops and devices, the ARRIS MultiTrust™ Advanced Rights Manager database will continue to be consistent and the back-office APIs will remain unchanged, reducing system impact and business operations.

Migration

Migration of a DRM is simple: If the replacement DRM has already been integrated into ARRIS MultiTrust™ Advanced Rights Manager then it is simply a configuration exercise. A completely new DRM would require a short integration phase.

If an encoder already supports the new DRM, again there is only a simple configuration change. A new encoder requires minimal integration effort.

The old and the new DRM systems can be available simultaneously to allow seamless client migration from one system to another. Again, the ARRIS MultiTrust™ Advanced Rights Manager database and back-office APIs remain unaffected.

Business as Usual

ARRIS MultiTrust™ Advanced Rights Manager gives the operator total control and complete flexibility in managing and securing their content. It also provides a comprehensive recovery and migration system that can adapt to changing technologies over long-term investment periods needed by today's multi-platform operators.

CUSTOMER CARE

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