

CONDITIONAL ACCESS SOLUTION

Advanced Video Protection Made Simple

The ARRIS Conditional Access solution gives service providers advanced control over video security while providing the flexibility and simplicity of a virtualized software environment. With this robust solution, video is protected by the same ARRIS codes and keys that have been trusted by service providers for decades. Because the solution is virtual machine-based, service providers have the freedom to leverage their current architecture and dynamically allocate resources as needed.

The Conditional Access Advantage

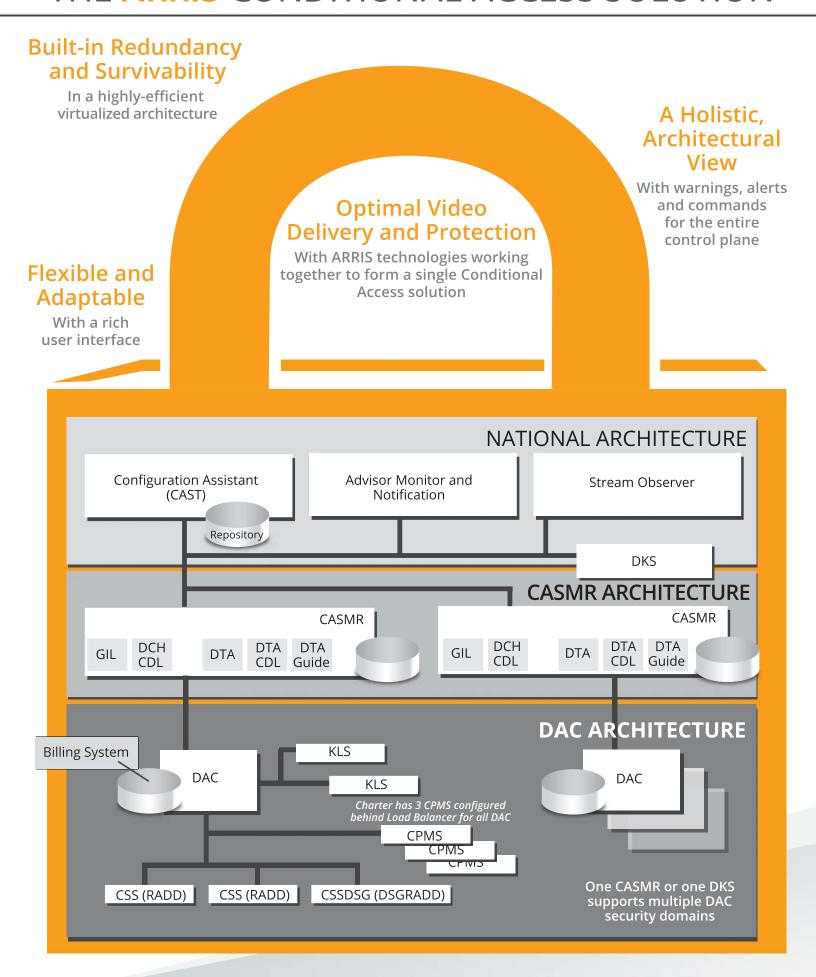
The ARRIS Conditional Access solution offers customers a rich and intuitive user interface allowing service providers to see regional coverage from a single controller. Beyond Conditional Access, it can help service providers ensure that sites are installing the same versions of the application and terminal firmware, giving them the ability to audit sites against the "golden configuration" to verify compliance. Service providers can also create change sets to help minimize maintenance windows and downtime, while benefitting from virtualized applications that enable disaster recovery and high availability. The one controller approach doesn't eliminate the DAC, it brings it forward making it part of the ARRIS Conditional Access solution.

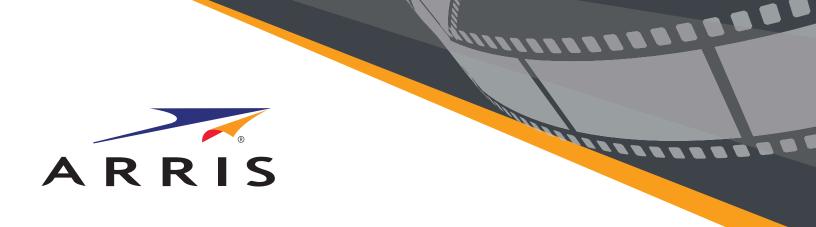
Service providers can focus on delivering the optimal video experience

BENEFITS

- Bullet-proof security based on the ARRIS patented chip
- Management simplicity with a one controller solution
- More flexibility, reduced costs and space savings using virtual machines (VM-based)
- Shorter time to market for new services offered by a turn-key solution
- Robust billing maintenance, firmware upgrade management and authorization functions handled by advanced software

THE ARRIS CONDITIONAL ACCESS SOLUTION





CASMR The ARRIS CASMR provides a point of deployment with a unified model for the control and data delivery system, with a flexible, location-based representation for the network transport through our topology. CASMR also provides a single console to manage and configure broadcast service routes. The CASMR DTA solution performs all conditional access operations, such as authorizations, refreshes, and initializations to field-deployed DTAs. Code download plug-ins (DCII, GIL, DSMCC Carousel) provide a simplified, yet robust managed solution to import code objects, and allow campaigns to be delivered to DTA, IP set-top boxes and DCII set-top box populations.

Key List Server The ARRIS Key List Server (KLS) is a secure key server for the encryption of high-value content. It maintains a secure unit key list for all set-top boxes and provides unique cryptographic keys and entitlement messages for the encryption of premium content.

Digital Addressable Controller 6000 The ARRIS Digital Addressable Controller 6000 system (DAC6000) addresses and controls headend equipment and set-top boxes. It authorizes video and audio services and operating features for the set-top population. It controls the encryption of services for secure delivery and interfaces with business systems for provisioning and inventory management. The services it provides in this capacity include service database management, automated scheduling for services, collection and input. The DAC6000 is at the center of all headend activity and management, where it maintains a database of terminal and headend equipment operating parameters, configures terminal communications, manages code downloads, supports interactive network functions and interfaces with network management devices.

Advisor The ARRIS Advisor is a monitoring system that allows the collection and evaluation of information for each component in the conditional access system. Advisor provides the ability to organize and monitor products, which have CASMR agents installed, across a geographic region. It aggregates the severity of each product and rolls up the highest severity through its serving locations hierarchy display. It disseminates the information to the clients so they may monitor the complex network of components and the signaling paths connecting them together for the state of the system services. The clients are IOS, Android and desktop capable.

Configuration Assistant The ARRIS Configuration Assistant (CAST) allows the creation of different repositories to distinguish plug-ins, firmware, and code objects from those that are in test, to those that have been validated. This tool provides control over which CASMR sites have access to each of the repositories. In doing so, this tool allows the customer to manage these repositories so that various CASMR sites can share access. This will make it easier for the customers to rollout new features and apply maintenance upgrades.



Digital Key Server The ARRIS Digital Key Server (DKS) is the key server for encrypted DTA services that use DTA full encryption. The DKS provides secure in-band messages for the decryption of modified privacy mode encrypted content.

CASMR Stream Server The ARRIS CASMR Stream Server (CSS) is used in conjunction with the ARRIS DAC. The CSS provides a robust and scalable networked access control system. The RADD supplies real-time repetitive messages, such as purchase and power-level polling and code downloads, to the set-top box population. The system scales through the addition of multiple CSSs, each managing similar real-time tasks on a segregated portion of the network. The CSS also has the ability to be remotely upgraded with the CAST.

Copy Protection Management System The ARRIS Copy Protection Management System (CPMS) validates card-host pairing on cable-card equipped set-top boxes to ensure encrypted content is secure. Copy-protected content is only accessible to properly validated hosts.



©ARRIS Enterprises, Inc. 2016 All rights reserved. No part of this publication may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from ARRIS Enterprises, Inc. ("ARRIS"). ARRIS reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of ARRIS to provide notification of such revision or change. ARRIS and the ARRIS logo are all registered trademarks of ARRIS Enterprises, Inc. Other trademarks andtrade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. Note: Specifications are subject to change without notice.

Note: The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.