

features

- A complete Smart Card Management System (SCMS)
- A solution for multi-application smartcard issuance, re-issuance and reconstruction
- A solution for complete lifecycle management of card, product, application, key and device
- A solution for post-issuance management, including product updates, card blocking, application upgrades and card termination
- A solution that easily extends to support new products, additional product owners and additional card platforms
- A solution that has the flexibility and is scalable to ensure performance suitable for any size of smart card program

Card Issuance

Issuing multi-application smart cards involves processing cardholder data, collating product data, preparing card and product keys, loading and personalising applications on smart cards, issuing the cards and distributing PINs.

Arterium SCMS provides an integrated solution with automated processing of cardholder data files, complete product and data preparation processes, secure card personalisation and automated post-production PIN distribution.



Post Issuance

Arterium provides full post-issuance support for cards after they are already in the field.

Arterium is able to:

- Load new applications on to a card
- Delete applications from a card that are no longer used
- Temporarily remove applications from the card and re-activate them later
- upgrade applications already issued
- block cards that have been reported lost or stolen

All these changes can be made at the individual card, sub-group or global level.

Arterium User Interface

Arterium has a web-based user interface making it easy to manage your cards and card applications.

Arterium Security

Arterium maintains the highest levels of security, so that the integrity and confidentiality of all data within the application is maintained throughout the lifecycle of the card.

Arterium creates secure channels to receive or retrieve card holder data from external sources and to move data between distributed components of the application, such as to and from the card production site.

Confidential data is held as encrypted values in the application database, and this data can be cleared from the database as soon as card personalisation is completed. Secured channels are used if multiple application owners want to share the same card, they can do this and still individually retain full control of their respective security keys and data. If required, multiple Arterium installations can collaborate to perform management of a singlecard.



Benefits

Control

Arterium manages all card personalisation data including chip applications in preparation for card production

Security

Card data including chip applications are managed using Arterium and transmitted securely during the card production phase minimising the risk of data tampering

Profit

Increase revenue and customer loyalty through richer customer propositions - payment applications (EMV), loyalty applications, stored value/electronic wallets can all be loaded and managed by Arterium for each customer card

Flexibility

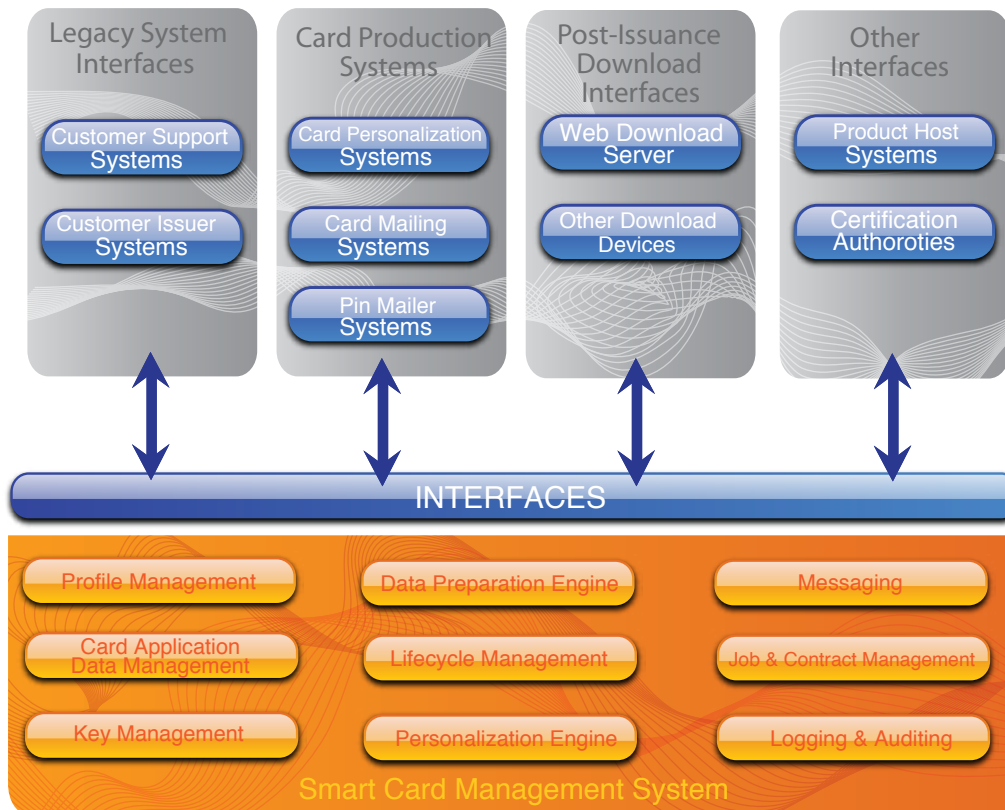
Cost sharing and strategic cooperation through multi-application functionality – one card, multiple functions/applications on the chip

Convenience

Post-issuance card updates – update/add/disable applications on the chip when the card is presented at an ATM, payment terminal or over the air to minimise queues in branches.

Arterium Architecture

Major smart card programs need the best security, functionality, scalability, fault tolerance and redundancy. Operations often require high capacity and high availability, and accessing hardware cryptographic devices can be a serious bottleneck in card production when multiple concurrent personalisation jobs are competing for the same cryptographic resources.



“Complete lifecycle management for smart cards, applications, keys & devices”

Arterium’s modular design separates core services and database, file servers, crypto servers and HSMs, and supports the clustering of components on multiple servers, automatic load balancing and includes fail-over capabilities for increased robustness.

Arterium allows duplication of cryptographic resources, allowing flexibility in distribution and management to improve cryptographic access and card production throughput.

Arterium is able to interface to multiple card personalisation devices simultaneously to maximise throughput, while performing card production at the same time as carrying out data preparation and batch file processing.

Arterium uses a collection of profiles to configure the application operation. These profiles provide genuine flexibility and make it easy to cater for:

- **Manufacturers introducing new card types**
- **Products requiring default parameters to be used during production and post-issuance personalisation**
- **Issuers requiring different product values to be used for different customer groups**
- **Issuers wanting to quickly and efficiently change the product offerings to their customers**
- **Issuers wanting to quickly and efficiently add new product to their existing smart cards.**

Arterium Globally



Over 15 years ago, the creators of Arterium recognised the need for a comprehensive infrastructure solution to manage the complexities of supporting smart cards. Arterium was born following initial market research and consultation with more than 40 leading vendor and user organisations in Europe, Asia and the United States.

Its design incorporates a level of flexibility that makes it equally suited to: Banking and financial card programs, Government ID programs, health, education, transport and licensing, Multi-issuer card bureaus, Retailers and other card scheme operators, Corporate employee ID, e-purse operators, Telcos.

Today Arterium SCMS is a mature product suite that offers a superior, flexible solution that eliminates the complexity of deploying and managing multiapplication smart card systems. It has been implemented in Australia, Korea, Taiwan, Singapore and USA.