

# Aconite Technology – Products and Benefits

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## Introduction

This paper describes the EMV® and smart card product suite available from Aconite Technology. These products are designed for integration with new or existing card issuer platforms that need a high-spec, low risk and cost-effective pathway to full EMV compliance.

The specialist fields of EMV or other smart product issuing, EMV transaction authorization and scripting, and PIN Management for EMV or other applications are all supported in mature, market-tested Aconite products. These products can be implemented together, making use of their built-in integration to optimize data flows, or can be deployed singly and connected to existing or third-party components to deliver the required functions.

## Products

The Aconite Technology products that we describe here are:

- ▶ **Aconite Payment Application Manager (PAM)** – a fully PCI-compliant app, chip and OS-neutral data preparation and application management system
- ▶ **Aconite Transaction Manager (ETM)** – a fully-featured EMV authorization processor and advanced EMV scripting engine
- ▶ **Aconite PIN Manager (APM)** – which unifies PIN creation, capture, distribution and management of all PIN lifecycle events in a single secure system.

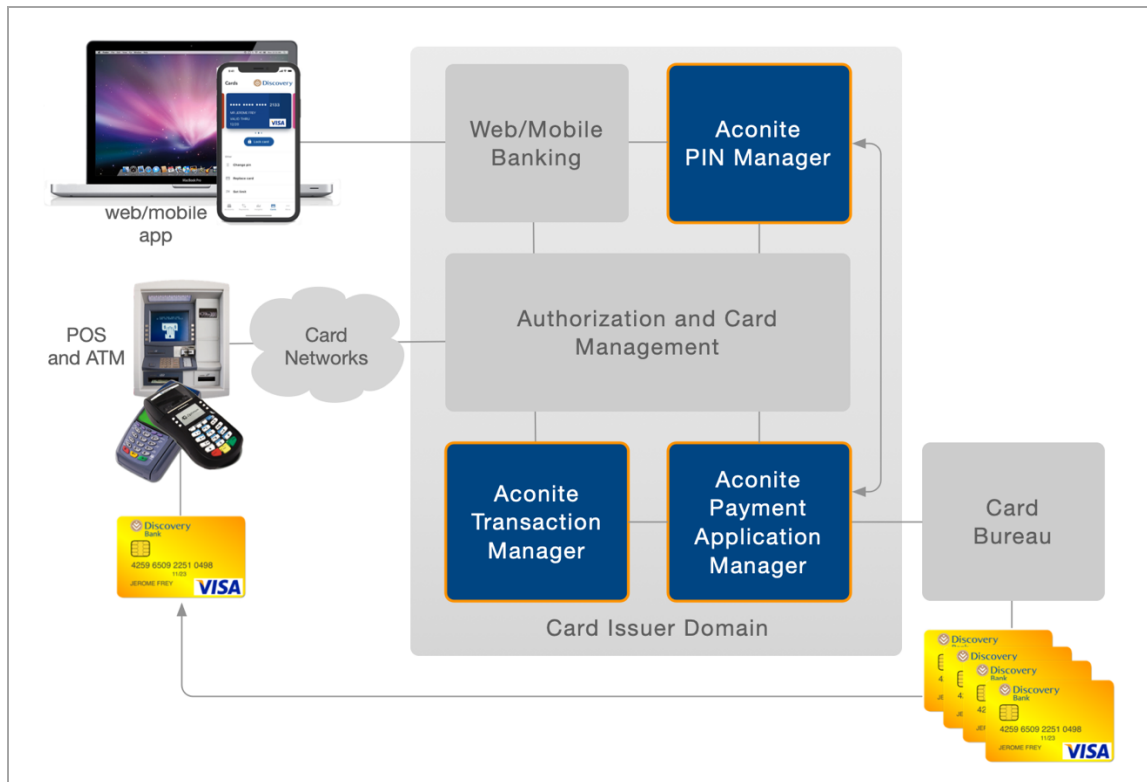
## Benefits

All Aconite products are designed to reduce risk and save money when compared to their equivalents from other sources, although the functional capability of the Aconite products often exceeds that of other EMV systems. The key features that enable these objectives include:

- ▶ easy integration with existing components using interfaces optimized for purpose – web services APIs, TCP/IP messaging, XML files etc.
- ▶ configurable, feature-rich specifications, exceeding the minimal feature sets available as EMV upgrades from traditional vendors
- ▶ neutrality with respect to card brands/networks, chips, operating systems, applications
- ▶ the ability to incorporate custom requirements that are later absorbed into the standard codebase
- ▶ on-going compliance with card brand, PCI and other standards through regular maintenance at no additional cost, eliminating the need for in-house compliance development
- ▶ worldwide 24x7 support via dedicated helpdesk.

## Deployment

A typical deployment of the Aconite suite is illustrated below, and descriptions of the individual products follow.



In this example, the Authorization/Card Management system could be, for instance, Postilion, BASE24 or another switch. Card data preparation takes existing card embossing files and enriches them with EMV and security data, which can include a PIN requested from APM or a customer-selected PIN captured electronically via web/mobile banking or IVR. The enriched files are sent to the bureau for card production and/or can be used for virtual card creation and delivery. As PAM is a real-time system, it can also operate on demand and forward enriched requests to an instant issuance system.

## Product Detail

### Aconite Payment Application Manager (PAM)

**PAM** manages the end-to-end lifecycle of any devices with chips (smart cards, mobiles, wearables, transit faregates etc.) and their applications. Functions range from data preparation through key management to post-issuance update. Profiles for cards and their applications that PAM will personalize are flexible and user-defined. Operating on demand and in real time, PAM supports both central batch and instant issuance of cards and other smart devices. PAM is fully PCI compliant.

### Aconite Transaction Manager (ETM)

**ETM** adds advanced EMV capability to mag-stripe card systems. An easily implemented plug-in architecture minimizes change in existing systems, preserves investment and legacy functions and reduces risk and time to market. ETM is fully PCI compliant.

### Aconite PIN Manager (APM)

**APM** supports PIN capture for self-select and PIN change, and PIN distribution over digital channels which brings tangible benefits in security, cost saving and customer service. APM can also generate PINs and can be the system of record for PINs. APM is fully PCI compliant

and meets all card payment scheme and national (e.g. UK Cards) requirements for PIN handling.

## Case Studies

Aconite products have been deployed by many card issuing institutions and service providers around the world including Fiserv and Navy Federal Credit Union in the USA, Nets and International Card Services in Europe, and Discovery Bank and Tutuka in South Africa. Three brief summaries of Aconite implementations follow.

### Fiserv

Fiserv are one of the world's leading payment service providers and use ETM for all EMV authorization processing, serving their issued cardbase of more than 50 million cards. ETM is mission-critical and is distributed across multiple datacenters, processing more than 2,00 transactions per second.

### Discovery Bank

Discovery Bank is South Africa's newest digital-only challenger bank, and has come to market in an remarkably short timescale thanks to their innovative approach to procurement and implementation. At the core of their operation is the *Banking Services by SAP™* platform which has built-in integration with all the Aconite products in a similar manner to the configuration shown in the diagram above. Web and mobile banking apps, which are fully integrated with APM for PIN capture and distribution as part of online account opening, are supplied by Backbase, the market leader in this field. Discovery Bank have sought out the best-in-class components to provide their banking and card issuing platform and that selection policy has been justified by their arrival in the market as a major disruptor of the SA banking scene.

### International Card Services

ICS is the card-issuing arm of ABN-AMRO in the Netherlands and worked with Aconite to make a business case for in-housing their previously outsourced card issuing and authorization processes. EMV data preparation and key management had been provided by one of the large card bureaux and authorization had been delegated to the card networks. Over time costs had steadily increased to the point where both profitability and agility in the market were compromised. By deploying Aconite PAM and ETM in-house, integrated with their Tieto Card Suite system, ICS were able to make savings of over 30% on their operating costs in these areas and introduce new products with a far shorter time to market.

## Summary

Aconite EMV and smart card products enable card issuing organizations to deploy state-of-the-art solutions for EMV card issuing, transaction authorization and PIN Management, including digital capture and distribution, in a quick to market, low risk and cost-effective way.

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