# THALES

# Secure Digital PIN Management with Thales payShield 10K



Reduce costs, improve security, and increase customer satisfaction with digital PIN management secured by Thales payShield 10K HSM.

#### Solution Benefits

- Lowers cost of deploying PIN management for customer accounts
- Enables banking customers to set, view, or change their PIN instantly.
- Offers a secure alternative to the cumbersome legacy PIN Mailer approach.
- Supports PIN-based authentication and authorization within insecure channels.
- Reduces risk of clear PIN exposure to external and internal attackers.

## Secure PIN Digitisation

Secure PIN delivery and management is a persistent problem faced by card issuers. The traditional mechanism for solving this problem is the use of tamper evident PIN mailers which are sent via the postal service and prevent the PIN from being read unless the envelope is opened. In many countries this is unreliable due to postal delivery and interception problems, and in today's digitised world is often unacceptable to customers who now manage everything through their mobile or browser.



Combined with the security/usability problems of PIN mailers, digital PIN management continues to grow in popularity to support reducing management of costly PIN mailer printers. Lastly, Digital PIN management delivers immediate results to customers, regardless of location, keeping their transactions secure and preventing potential reduction in revenue through loss of card use at the point of sale.

Online PIN delivery systems are not a new concept, but without careful thought and secure architecture solutions can lead to exposure of the sensitive PIN, leaving the customer vulnerable and resulting in potential breaches of data.

### PIN Management secured by Thales

A primary function of the payShield 10K HSM is secure PIN management which can be extended to support digital management through both the browser and mobile.

#### Why payShield 10K

- PCI certified HSMs to meet audit and scheme requirements.
- All sensitive PIN/Cryptographic operations protected with secure HSM boundary.
- Industry standard approaches used for PIN/Key Management.
- Application Server and Internal Network have no visibility of clear PIN.

### Solution Specifications

- Public Key Cryptography used to bootstrap key exchange between browser and HSM (For example, pinned certificate if using mobile application).
- PINs encrypted using standard ISO format PIN blocks.
- Bi-directional management of PINs allowing PIN Set, PIN Change, PIN View.

#### Additional Resources

payShield support for Online/Mobile PIN delivery is fully explained in the payShield 10K Applications Manual

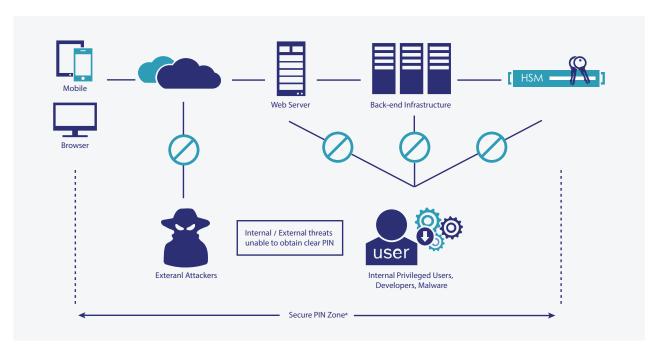
Professional Services additionally provide a range of services to guide customers including:

- Consulting and workflow design
- Software development
- Hybrid/pair-programming support

#### About Thales

The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.



<sup>\*</sup> Session PIN Key encrypted with RSA Public Key (via Pinned Certificate), PIN Block encrypted under session PIN key.







