

Bank Card Security System (BCSS)

Leveraging Prime Factors BCSS and Thales payShield 10K for Faster Time to Market, Lower Costs, and Reduced Risk

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Executive Summary



Bank Card Security System (BCSS) is an ideal complement to the **Thales payShield 10K**, helping deliver critical security elements needed for custom payment applications to meet industry compliance **out of the box**.



Faster to Market

Enterprises can launch compliant payment applications in a fraction of the time with out-of-the-box security functionality including pre-built workflows designed for payment card security.



Lower Costs

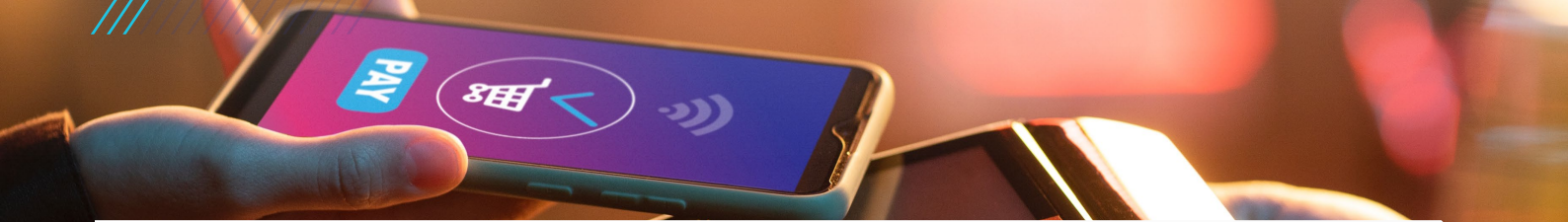
BCSS is a high-level API that simplifies payShield 10K HSM integration, so developers don't need to learn proprietary host commands. It automatically manages hardware load balancing, redundancy, and failover.



Reduce Risk

BCSS delivers security tools, forensic-level audit logging, and granular access controls to help enterprises remain PCI audit-ready, while also staying up to date with evolving compliance standards and market trends to allow security postures to adapt seamlessly over time without costly application re-work.





Payment Security Challenges

Developing payment applications to meet industry security standards can be **expensive** and **time-consuming** - requiring specific payments expertise, complex hardware integration, and lengthy development timelines to deliver all the elements required for PCI compliance.



Payment card applications must address several security challenges, including:

Payment Complexity



Evolving Industry Standards



PCI Hardware Requirements



Audit Readiness



Payment Key Lifecycle Management



Security Enforcement



Implementing payment security in card issuance and acquiring applications can be incredibly complex. **But there is a better way.**





Simplifying Payment Security

Building Secure Payment Card Applications Faster

BCSS helps simplify payment security for enterprises **building and managing** their own payment applications.

Speed Up Time to Revenue

Out-of-the-box security functionality with hundreds of pre-built workflows specially designed for payment card security allows developers to build compliant payment applications in a fraction of the time.

Simplify HSM Management

A high-level API with pre-built payShield integrations to streamline implementations. Robust load balancing and load targeting with advanced controls managing transactions across HSMs **on premises or in the cloud.**

Stay Audit Ready

Leverage payment security tools and infrastructure that has **stood the test of PCI auditors for decades** including tamper-proof, forensic-level audit logging and reporting functionality.

Enforce Compliance

Reduce risk with payment key lifecycle management and enforcement of key controls, key quorums, dual sign-on, and separations of duties with **granular role-based access controls.**

Save Money

Building payment security functionality often requires extensive expertise in payment and hardware cryptography. However, BCSS natively delivers tools, controls, and functionality **your programmers won't need to design, develop, or maintain.**

Adapt Easily to Change

BCSS evolves over time with industry trends and hardware platforms. Adapt to changes in business requirements, payment schemes, and compliance standards seamlessly **without complex re-development.**



Simplifying Payment Security

Building Secure Payment Card Applications Faster

Simplified HSM Integration & Transaction Controls



- Hundreds of pre-built workflows
- High-level API for payShield 10K
- Embedded load balancing

Better Organization for More Efficiency



- Robust key management
- Functional partitioning
- LMK rotation automation

Better Visibility & Compliance



- Granular separation of duties
- Forensic-level audit logging
- Simplified cloud migration





Payment Card Use Cases

Where BCSS Helps the Most

Building a payment card issuance platform

Building a card acquiring platform

Recovering from a failed PCI audit

Existing payment applications migrating to payShield 10K

Cloud migration of payment card applications



BCSS Impact by the Numbers

COST SAVINGS

75%

reduction in development cost

LAUNCH SPEED

12 Days

to launch production after a failed PCI audit

TIME SAVINGS

80%

reduction in development timeline

HUGE SCALE

9K Unique BINS

in a single deployment

GLOBAL REACH

6 Continents

with active customers





Why Customers Love BCSS

Make Money



BCSS delivers **out-of-the-box security functionality** to help developers build compliant payment applications in a fraction of the time and **speed up time to revenue**.

Save Money



Integrate with **payShield 10K** faster, without programming to proprietary host commands, and automatically manage hardware, **load balancing, redundancy, and failover** with BCSS.

Reduce Risk



BCSS helps you stay up to date on **industry standards, payment security trends, and deployment models**, so your security posture or environment can **evolve over time without expensive re-work**.



For more than 30 years, Thales and Prime Factors have collaborated to help enterprises navigate the ever-changing landscape of payment security efficiently and securely. The payShield 10K HSM brings industry-leading functionality for payment security, while BCSS adds the application-side controls, organization, and abstraction that help deliver faster time to revenue for payShield deployments

Thales 12052025

Building Secure Payment Applications Has Never Been Easier. Learn more about [BCSS](#)