



# Prime Factors Bank Card Security System

## Bank Cards Have Never Been More Secure

The Bank Card Security System (BCSS) is the latest in a line of credit/debit/pre-paid card processing software from Prime Factors. BCSS is designed for banks, third-party bank card processors, retail chains, and card manufacturers who need to produce plastic cards that meet the security standards established by Visa®, MasterCard®, American Express®, Discover® and others. BCSS is designed to help both issuers and acquirers meet the security requirements associated with different types of plastic media: magnetic-stripe cards, smartcards (chip cards), or contactless cards (RFID cards).

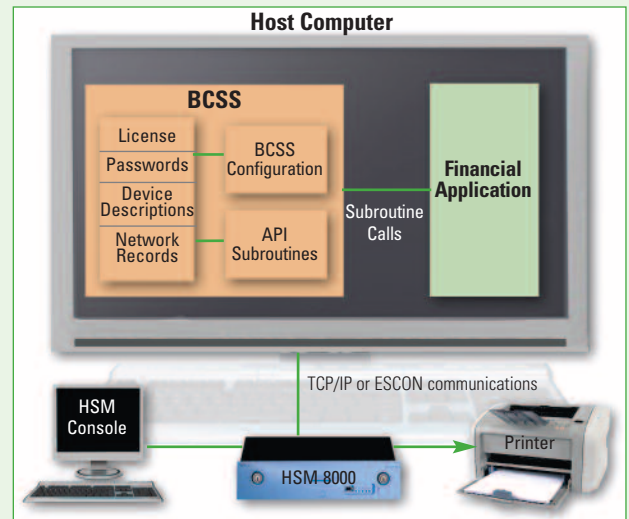
## The Typical BCSS Environment

The BCSS environment includes a database, a configuration program, a library of subroutines, and one or more host security modules (Thales HSM 8000s). The database stores encrypted 3DES keys in addition to RSA public/private keys used to support EMV2000 operations for chip cards. The database also contains other information such as a user-defined name, a status flag (active or not), a text description field, several PIN related fields, the Primary Account Number length and CVV service code.

The configuration program accesses the HSMs and maintains the database via a text or graphical interface based on the type of host computer. The library of subroutines handles more than 70 functions that access the database and HSMs, and is called from the customer's application systems.

## Hardware Support and Compatibility

The BCSS architecture supports the use of the HSM 8000 Host Security Module (HSM) from Thales e-Security. BCSS builds commands for the HSM, manages Ethernet (TCP/IP) communication to the HSM, and stores encrypted keys returned from the HSM in a database. BCSS also supports the Thales Security Resource Manager (SRM) to provide load balancing for multiple HSMs and support for additional communications protocols such as ESCON. When used with the HSM 8000, BCSS meets the FIPS 140-2 Level 3 security standard issued by the U.S. Government.



## Prime Factors Resells Thales HSM 8000

Prime Factors works closely with Thales e-Security to provide customers with comprehensive hardware and software solutions designed to meet the dynamic processing needs for today and tomorrow.





## Software Designed for the Real World

- A menu-driven utility to manage the database of encrypted keys
- A library of subroutines which can be called from a customer's own application programs
- A Card Utility for Unix & Windows customers that uses card holder information and the BCSS database to create output data needed by embossers to issue plastic cards or send out PIN mailers.

## State-of-the-Art Security Software

BCSS can be used to issue and validate a wide variety of credit, debit and prepaid cards. BCSS supports the generation and verification of security codes such as CVVs, CVV2s, CVCs, CVC2s, CSCs, PVVs, PINs, PIN Offsets and PIN Blocks used for magnetic-stripe cards as well as CAVVs. BCSS also supports EMV2000 standards for smartcard (chip card) processing, including DDA support.

## Experienced Technical Support

Our friendly, knowledgeable tech support personnel are available during product trials as well as after the sale to answer your questions. A typical BCSS customer remarked, *"Prime Factors has been absolutely fantastic when it comes down to customer support and they have a level of expertise that is really invaluable. They were able to get us from Point A to Point B—resolving our problem quickly without sending us off in different directions."*

## Support for Multiple Operating Systems

BCSS is available for the following operating systems: zOS, OS/400, HP-UX, Sun Solaris, AIX, Linux and Windows.

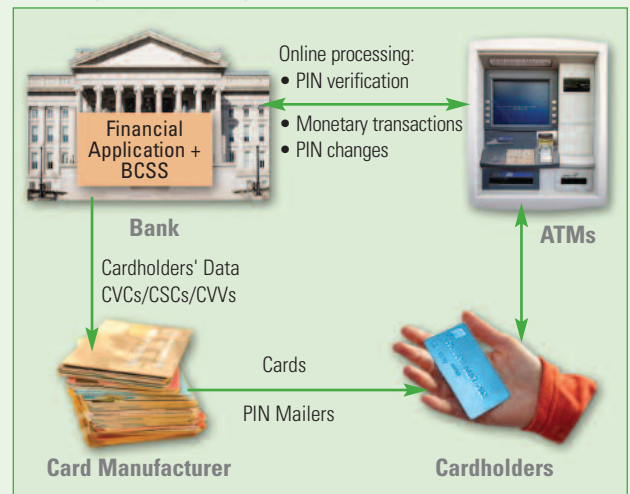
## Other Security Products

Prime Factors has several other security products in addition to BCSS. These products are designed to protect various types of data in motion and data at rest. See our website for details.

## Free 30-Day Trial

Download a free, fully-functional 30-day trial of the BCSS software with complete technical support available to answer all your questions. Please visit our website to get started.

## Life-cycle of a typical credit/debit card



*Each cardholder's security codes created by BCSS are sent to a plastic card manufacturer (embosser). The finished cards & PIN mailers are sent to the cardholder. The cardholder then uses those cards at retail outlets or ATMs. The card data, plus security codes, are verified using BCSS.*

## Your Trusted Source for Data Security

Since 1981 Prime Factors, Inc. has been an internationally recognized and trusted designer and producer of information security and data encryption systems.

More than 1,000 financial institutions and other corporations rely on Prime Factors' innovative systems to guard sensitive information from internal and external threats. Prime Factors provides the latest in security technology while maintaining ease-of-use and dependability in all our products.



**PRIME FACTORS, INC.**

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