

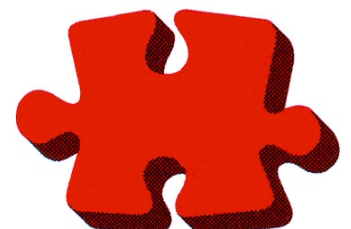
Why rely on PC technology for your vital EMV credit and debit card systems?

Instead, exploit the power, reliability, integrity and security of your IBM® zSeries or System z mainframe.

**SpanKey™** from Span Software is a pure mainframe (z/OS) product that provides all the functionality you need in one place.

### EMV on the mainframe, where it belongs .....

- Increased speed by running all-assembler code
  - Increased security via RACF (or equivalent)
  - Increased reliability and availability (24 x 365)
  - No need to purchase multiple backup Servers
  - No need for external HSMs.
  - On-line real-time EMV cryptographic processing (ARQC validation, ARPC generation, PIN validation, PIN Change, etc) on the same mainframe as batch chip card production
  - Reduced key management and increased security - keys are not split across multiple platforms
  - No synchronisation issues of data fields used in script processing
  - Automatic creation of card production data for Scheme specifications (eg VIS 1.4, MChip 4)
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- RSA Scheme Key exchange in appropriate self signed format at the touch of a button
  - DDA (RSA) ready with ultra high speed key generation (~ 1 millisecond to retrieve a new unique RSA key)
  - Assists with PCI compliance





The following are some of the highlights of the features provided in SpanKey Release 3.10:

- Key Management System for all cryptographic keys. Support for symmetric encryption and asymmetric encryption.
- Key Management System for all cryptographic keys used by EMV Chip cards and other banking functions.
- Full Key Management functionality, including support for multiple MVS systems, Import and Export facilities, key database backup and restore, inclusion of existing key values, reporting, etc.
- EMV Card Data Generation system without the requirement for application programming. Fully flexible control by means of parameter statements. Includes support for DDA.
- All cryptographic processing performed in secure hardware on a System z IBM mainframe.
- Management of the contents of the ICSF CKDS and PKDS datasets.
- SpanKey/SE is also available for development and testing without the need for cryptographic hardware. SpanKey/SE can also be used for performing cryptographic processing on IBM-compatible or emulated mainframe systems. Optional emulation of ICSF is provided for systems without cryptographic hardware.
- Offline key definition and generation processes.
- Sophisticated PIN generation and management functions.
- Support for randomly-generated PINs, and PINs derived from account and other data.
- Facility to ensure that both pre-defined and particular dynamically selected PIN values are not issued as customer PINs.
- Online delivery of EMV certificates and generation of chip card data.
- Functions support EMV SDA and DDA options.
- Card issuer RSA key pairs generated, self-signed in both VISA and MasterCard formats.
- RSA Key and Certificate storage database, key management and reporting functions.
- All interchange files that are required for sending issuer keys to card schemes created.
- Interchange files from card schemes containing certified issuer keys processed.
- Certificates for issuer keys cryptographically validated.
- Interchange files containing card scheme public keys processed.
- High performance certificate management and delivery for EMV certificates.
- High volume RSA key generation facility, with instantaneous delivery of unique RSA key pairs to application programs.
- Run time APIs supplied for Digital Signature creation and verification.
- Run time APIs supplied for working key generation, data encryption and message authentication.
- Run time APIs supplied for EMV Unique Derived Key generation, and for VISA and MasterCard Session Key generation.
- Run time APIs supplied for creating EMV DDA RSA keys and card data.
- Run time APIs supplied for PIN generation - all PIN values are held encrypted at all times.
- Run time APIs supplied for PIN derivation and verification - all PIN values are held encrypted at all times.
- Application program support for COBOL, Language Environment and Assembler applications.
- Optional RACF protection for all commands and functions.
- Optional RACF protection of access to certificate and other data from the SpanKey data space.
- Optional RACF protection of access to RSA key generation facility and delivery of RSA key pairs.
- Optional SMF records created for all Key Management change activity.
- Fully panel-driven user interface for all key management functions.
- Interactive enquiry and reporting facilities for all data elements, such as DES and RSA keys, Certificates, PIN tables, Certification Authorities (card schemes), etc.
- Search facilities for keys and Certificates that are expired or logically deleted.
- Test programs are supplied for many encryption and other SpanKey functions.
- Interactive testing and demonstration facilities for SpanKey Application Programming Interfaces.

Free 30-day software trial available to qualifying financial institutions - no cryptographic hardware required.

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More information at: [www.spansoftware.com](http://www.spansoftware.com)

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