



3X Software Ltd
Bringing you Solutions

EFT/400

Card Payment Software with Encryption and Post coding

**MasterCard.
SecureCode.**

Verified by
VISA

IBM Server
Proven

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EFT/400 Card Payment Software

Are you having problems with processing card payments? Do you want to be able to process your Credit/Debit and purchasing card payments on one of the most robust and secure servers around? Then you need to be processing on the IBM System i or iSeries with **EFT/400**. **EFT/400** provides an affordable card payment and fund collection system that can be relied on.

EFT/400 will handle your authorisation of payments via Internet, Telesales, Mail order or customer present Chip and Pin transactions. The application also enable you to process Chip and Pin transactions via your network directly from the System i. This is the only UK solution of this type

Overnight, all payments (and order item details for purchasing cards) are automatically batched and transmitted to the acquiring bank, to enable funds to be moved from your customer's issuing bank to your nominated bank. Sales ledger interface records can also be generated.

You can trade in multi currency, multiple companies with multiple acquirers.

And all of this without leaving your System i !

Should you have any special requirements, we will always discuss them, and we are usually able to accommodate them to meet the exact needs of your business, as we own the code.



EFT/400 Key Features

- Peace of mind with Secure Payments
- PCI—Protected data utilising AES 256 Encryption
- PCI— Restricted access to cardholder data
- Full audit trail
- Can be interfaced into your current systems
- CVS and AVS checking available
- Chip and Pin Compliant
- Purchasing / Procurement card processing
- High Volume Processing
- No additional servers required
- Accredited with all major banks
- Multi Company; Currency; Acquirers
- Cost effective
- Cross Industry Sector
- Seamless interface for Chip and Pin over IP
- Customer present and not present transactions
- 3D Secure MasterCard SecureCode and Verified by Visa
- Optional Post Code Address Management

Typically, orders taken over the internet involve 2 discrete processes - order entry using a "shopping mall" or similar, and payment entry, which normally switches entry to a "Payment Service Provider" (PSP), who will charge a percentage of the order value to provide secure payment processing.

A full audit trail is produced enabling detailed transaction enquiries.

Reports are produced showing the numbers and values of payments sent by **EFT/400** and acknowledged as received by the acquirer. This effectively guarantees the transfer of payments to the user's bank account.

EFT/400 Card Payment Software

EFT/400 reports and enquiries can run outside the EFT/400 system. You can include an EFT report or enquiry within your own programs.

Over 25 API's are provided, these programs enable user tailoring of system parameters outside of the system.

A test/training environment is provided, enabling user defined responses to transactions, which allows off-line testing and training with predictable results.



How does EFT meet the PCI Standard?

The **EFT/400 Encryption** module addresses the following PCI requirements:



Requirement 3: Protect stored cardholder data

Encryption is a critical component of cardholder data protection. If an intruder circumvents other network security controls and gains access to encrypted data, without the proper cryptographic keys, the data is unreadable and unusable to that person.

Requirement 7: Restrict access to cardholder data by business need-to know

This requirement ensures critical data can only be accessed by authorised personnel.

7.1 Limit access to computing resources and cardholder information only to those individuals whose job requires such access.

7.2 Establish a mechanism for systems with multiple users that restricts access based on a user's need to know and is set to "deny all" unless specifically allowed.

EFT/400 Encrypt is brought to you with its own inbuilt encryption that is versatile and easy to use solution. We have made every effort to make the solution easy to implement, use and manage by automating the process as much as possible.

The solution has been built around strong encryption and encrypts data using the Advanced Encryption Standard AES and utilises a 256 bit key to give you the maximum security. We provide dynamic on the fly encryption and decryption and data is also protected by our unique access control system.

The use of Master Keys and Data encryption keys allows full key management and key rotation without the need to re-encrypt your data.

Features:

- Credit card numbers are stored encrypted and where displayed will be masked and only last 4 digits of card are generally available unless the user is authorised to see the whole number.
- Data is Encrypted using AES 256 bit encryption
- Access to full data restricted to 'need to see' users by security access cards
- Encryption key management included
- Full Audit trail of card data enquiries.

What about AVS and CSC?

Whilst reports from APACS show that Plastic card fraud losses are on the decrease with the introduction of Chip and PIN, fraud from customer not present (CNP) increased by 21% in 2005. This figure is expected to continue to rise as fraud becomes more difficult to undertake in the face-to-face environment as a result of initiatives like Chip and PIN. Nevertheless, the rate of increase is smaller for the first time since 2003, and will improve further with an increasing number of retailers utilising initiatives such as AVS/CSC.

Customer not present fraud usually involves the theft of genuine card details and are then used over the Internet, by phone or mail order. The legitimate cardholder doesn't usually find out until they check their statements.

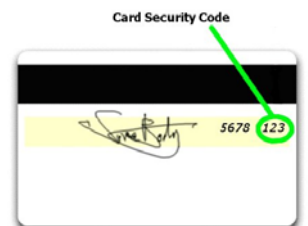
What can you do to reduce this?

EFT/400 has CSC and AVS checking built in. CSC (Card Security Code) and AVS (Address Verification Service) uses the 3 digit code on the back of debit/credit card and numerics from the cardholders address. These are passed to the acquiring bank and are cross checked against the details held by the bank. The result of the checks are passed back letting you know whether the house name/number has been matched, partially matched or not matched and likewise whether the postcode is matched, partially matched or not matched. You can then make the decision as to whether to accept the transaction based on this additional information.

Other benefits:

- It can also be used to cross check the delivery address is the cardholders home address.
- The number is difficult for fraudsters to reproduce.
- It is also difficult to steal, because merchants are not permitted to store the number on their systems.

It has been suggested that the introduction of this simple check can reduce internet fraud by up to 70%.



Internet Security using 3D Secure

3X Secure is a module that can be purchased from 3X Software is fully integrated with EFT/400 to increase the security of payments made via the internet. It enables merchants to integrate their payment processing with Visa's 3D Secure and MasterCard's SecureCode protocols and functionality.

Until now, Internet based transactions have been defined as 'cardholder-not-present' (CNP) transactions, meaning that a person purchasing from a web site does not present their card to the merchant, and there is no way of verifying a signature, or asking the purchase for a pin number in order to verify that card does in fact belong to that person. If, after an online purchase has been made, the card owner states that they weren't the person using the card, then a chargeback may occur, resulting in extra costs to the merchant.

3D Secure is a credit card authentication program developed by Visa and MasterCard in order to address this problem, and reduce fraudulent use of credit cards during online transactions by verifying that the purchaser is in fact the owner of the card, resulting in fewer disputed transactions and charge-backs, thereby saving the merchants both time and money.

3D Secure is also known as Verified by Visa, and MasterCard SecureCode – both of these terms being brand names for the 3D Secure Protocol.

3D Secure is a protocol based on the 3-domain model, and uses Secure Sockets Technology to ensure that all parties involved in the transaction can be authenticated securely.

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Technical Specifications

System i , OS/400 version 4.5 or later

- plus 2 x V24 ports (one must be a 2699, 2720, 2721 or 2745 IO adapter).
- plus 35 Mb (*) for the application library
- plus 40 Mb (*) for the audit trail library for each 10000 payments per annum

Communications devices

ISDN Terminal Adapter + cable (supplied) for both authorisation and payment transmission

Or Vodafone Paknet radio pad + aerial + cable (supplied) for authorisation

Or IP Line

* - approximate figures for guidance only

Encryption utilities:

OS/400 V4R5—V5R1 uses AES 128 bit encryption

OS/400 V5R2 and later uses AES 256 bit encryption



About 3X Software

Founded in 1981, 3X Software offers a range of support and packaged solutions for all industry sectors. 3X has worked with nearly every type of industry over the years but with the one common factor – IBM midrange systems from system/34, system/36 system/38, AS/400, iSeries, i5, System i and more recently announced IBM Power Platform.

Today one of our specialities is the retail environment with our major products being focused in this area, these are our Credit Card Payment, Encryption and Postal Address Management products.

Our solutions are installed in companies as diverse as a market leader in Health Foods and Vitamins, a household name in the production of fine ceramics, a mechanical digger parts supplier, High Street Retail, Insurance and Manufacturing.

With our experience in supporting customers on all versions of IBM midrange systems we are well placed to offer ongoing maintenance and development of your systems, regardless of whether they are legacy or the most up to date of systems. Our proven expertise, combined with strategic partnerships with hardware and software suppliers within the IBM community, enable us to provide a full range of common sense solutions.