TRIMLINE SYSTEMS & SOLUTIONS

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PRODUCT DESCRIPTION

AUTONOMOUS ATM BRIDGE

Contents
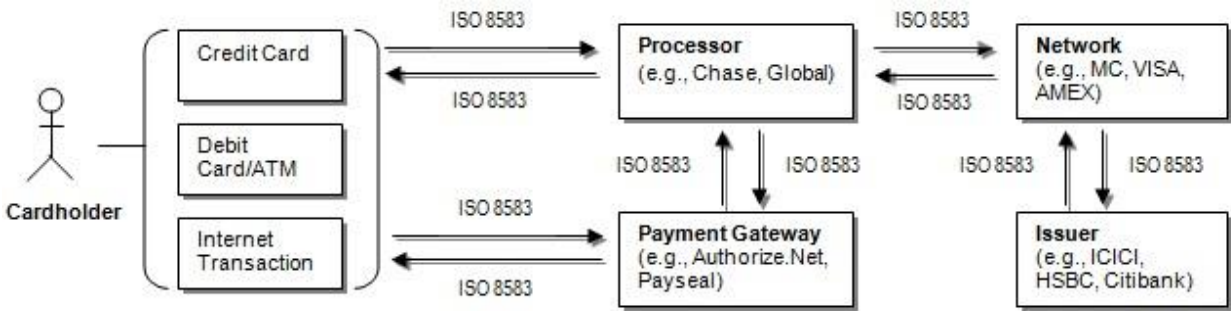
Process flow

Description

Whenever we use credit/debit/ATM card, the data traverse from one system to another. A card-based transaction typically needs to travel between a numbers of systems. For example, a purchase made in a store may travel from the merchant terminal, through an acquirer network or networks, to

the issuing bank where the cardholder's account is held. The transaction carries information about the type of transaction, the card used, the merchant, the transaction amount, security information, and so on. The response, authorizing or declining the transaction, needs to be returned via the same route to the terminal.

The data interchange that takes place between different systems needs to follow standard formats for integration, exchange and interoperability. There are many such standards existing. In Healthcare industry HL7, DICOM (Digital Imaging and Communications in Medicine) are the protocols implemented by the system, similarly in financial world there are the standards (protocols) ISO8583, ISO7816 etc, for the various kind of data interchange. ISO (International Organization for Standardization) is a worldwide federation of national standards bodies. ISO 8593 is Financial Transaction card originated, Interchange message specifications adopted by wide segment of Payment Industry (including Acquirers and Issuers). Standard can be further extended to support the transactions taking place between POS (Point of Sale Terminals) and Merchant Acquirer. ISO 8583 specifies message structure, format and content, data element and values of data elements. Application specification may remain at private level (implementer) and the method (message) by which settlement takes place is not within the scope of ISO.

Cardholder-originated transactions include purchase, withdrawal, deposit, refund, reversal, balance inquiry, payments and inter-account transfers. ISO 8583 also defines system-to-system messages for secure key exchanges, reconciliation of totals, and other administrative purposes.

In particular, both Master Card and Visa networks base their transactions on the ISO 8583 standard, as well other institutions and networks.

Features

Below are some of the transaction types:

- Balance Enquiry
- Mini Statement
- Cash Withdrawal - Coop ATM
- Cash Withdrawal - VISA ATM
- Reversal
- Utility Payment
- POS - Normal Purchase
- M-PESA Withdrawal
- Airtime Purchase
- POS - School Payment
- POS - Purchase With Cash Back
- POS - Cash Deposit
- POS - Benefit Cash Withdrawal

- POS - Cash Deposit to Card
- POS - M Banking
- POS - Cash Withdrawal
- POS - Balance Enquiry
- POS - Mini Statement

Security

Web services - Our Atm bridge uses web services (APIs) to integrate to co-banking system NAV. This makes it easy to control the bridge from Navision. This eliminates the need for special database rights as the atm account is set within the co-banking system.

Encryption – All atm numbers are encrypted and unreadable to human eyes. This means that no atm number can be changed in the backend as the atm bridge works with encrypted atm numbers. The encryption is done at the point the atm application/replacement is done. The process of linking the atms to account must have a make and a checker.

No Passwords –Our Navision web services have been configured to use access keys to login to Navision. These access keys are only used as by the APIs and no user can login to Dynamics Navision using the access key.

Auto posting – Dynamics Navision has a job scheduler which is used to process set tasks at desired time. If not configured nicely the Job scheduler can be a challenge to use. We have incorporated the process of updating the customers' accounts(posting) into our bridge application, with this the task of setting up the job scheduler becomes obsolete.

Pricing

Application Area	Functional Components	Quantity	Unit Price	Total (Kshs)
ATM Bridge	Cost of Application	1	300,000.00	300,000.00
	Customizations and Integrations	1	50,000.00	50,000.00
	TOTAL			350,000.00

Project Plan

Item	Duration(days)
Testing with the Bank	1
Going live	1
Total	**2**