



u/SWITCHWARE® Enterprise Transaction Processing and Management System

POS Module

OVERVIEW

Point-of-sale (POS) devices are becoming more and more prevalent in today's fast-paced society as a way to quickly process electronic payment transactions and continue the goal of moving to a truly paperless society. Many of today's savvy financial institutions, who already have an established payments network in place, desire the ability to offer local merchants a solution for processing their payment transactions through a network of POS devices deployed at the merchant locations. If your financial institution already operates a base release of the u/SWITCHWARE Enterprise Transaction Processing and Management System, the POS Module provides the ability to meet this business requirement.



The POS module is designed to support multiple institutions and multiple merchants. It also manages POS debit card authorization and routing while also tracking and tallying the daily transaction activity by merchant and by device, in order to settle accounts with the merchants.

The main purpose of the POS Module is to serve as a front-end interface to your POS terminal network, mediating communication between the POS terminal network, authorizing host application and EFT switch network(s). The module is comprised of three main functional areas.

General Functions:

- Merchant File
- POS Terminal Handling
- Settlement and Reporting

MERCHANT FILE

The merchant file contains important information (Figure 1) for each merchant serviced by your financial institution including; name and address information, transaction limits, related institution, and discount rate (used to calculate the bank's usage fees with the merchant and is based on the total amount of the POS transactions processed by the bank).

Merchant No.	59109	Institution	90
Merchant Type	5812	Merchant Status	AC
Flat Rate	.00 %	Max. Transaction Amt.	\$999,999.99
Discount Rate	2.60 %	Max. Transactions/Cycle	999999
Merchant Acct No.	340002352801	Max. Val. Transactions/Cycle	\$999,999.99
Merchant Name	The Convenience Store		
Address Line 1	123 Elm Street		
Address Line 2			
Address Line 3			
Address Line 4	Sarasota, FL 34240		
<input checked="" type="checkbox"/> Credit Merch Account			

(Figure 1 – Merchant File Data)

During the business day, POS terminals will send batch totals to u/SWITCHWARE. These values are accumulated for all terminals owned by the merchant and totals may be displayed by current cycle, month to date (Figure 2), year to date, previous cycle or previous year .

Month To Date Totals		
	Number	Amount
Purchased	12	\$2,199.34
Cash Out	0	\$0.00
Refunded	2	\$12.50
Net Amount		\$2,186.84
Merchant Fee Chrg	0	

(Figure 2 – Merchant Totals)

POS TERMINAL HANDLING

Terminal handlers are available that support POS devices manufactured by the industry's leading companies. These terminals may be deployed at retail stores, grocery stores or gas stations. The terminal handler interacts with the POS terminal resident application software that is normally provided by the terminal manufacturer or a third party specializing in this area of business.

A client application controls the definition of each POS terminal in the network (Figure 3). This information includes fields that identify the owning merchant, terminal ID, message format used by the terminal, device type, terminal location, time zone, receipt message, GL account number, floor and refund limits.

The screenshot shows a window titled 'POS 4876' with a 'Totals' tab. The fields are as follows:

- Inst. #: 90
- Floor Limit: \$999,999.99
- Merchant ID: 00000000053109
- Refund Limit: \$999,999.99
- Terminal ID: 00004876
- Region Code: [empty]
- Device Type: [empty]
- Time Zone difference: [+ is east; - is west]
- Terminal Processor Group: POS
- Message Format: ISO8583
- REG-E Address: 1801 Tamiami Trail
- City: Sarasota
- State: FL
- Country: US
- Alternate Language REG-E: [empty]
- Additional Receipt Message: [empty]
- GL Account Number: [empty]

Buttons at the bottom: Modify, Duplicate, Delete, Close.

(Figure 3 – POS Terminal Data)

Access is also provided to the POS terminal's transaction totals. These totals can be displayed by current cycle, month to date (Figure 4), year to date, previous cycle or previous year.

The screenshot shows a window titled 'POS 4876' with a 'Totals' tab. The 'Select Totals Type' dropdown is set to 'Month To Date' and the date is 'As of Tuesday, September 12, 2006'. The table below shows the following data:

Month To Date	Number	Amount
Purchased	12	\$2,199.34
Cash Out	0	\$0.00
Refunded	2	\$12.50
Net Amount		\$2,186.84

Buttons at the bottom: Modify, Duplicate, Delete, Close.

(Figure 4 – POS Terminal Totals)

SETTLEMENT AND REPORTING

Current and historical transaction totals are kept for each merchant and POS terminal. These totals, along with daily reports generated during end-of-day processing, facilitate reconciliation with the merchants. The system also has the option to automatically credit the merchants' bank accounts at settlement. The POS Module supports a variety of reports that can be used in settlement activities between your company and the merchants that you service. Reports include:

- Institution Settlement Summary
- Merchant Settlement Summary
- Terminal Total Summary
- Terminal Settlement Summary

POS MODULE SUPPORT

Terminals

- Akyman
- Hypercom
- Radiant
- Verifone
- Urmet
- Others (supporting ISO or Visa 2)

Protocols/Formats

- ISO 8583
- Visa 2

Communication

- TCP/IP
- Visa 2 Dial-up
- X.25

Transactions

- Inquiry
- Purchase
- Purchase reversal
- Purchase with cash bank
- Refunds
- Refund reversal
- Funds available inquiry
- Transfer
- Tips
- Pin change
- Transfers
- Mini statement (3, 5 or 10 transactions)
- Settlement transaction total

Receipt Printing (may require host interface)

- Marketing messages
- Fees

CSF International, Inc. (CSFi) is a global provider of enterprise transaction processing and management software. CSFi is located in Sarasota, Florida where the company's software development and technical support is headquartered. A global network of resellers extend CSFi's sales and support capabilities worldwide. CSFi software solutions provide services to hundreds of companies in over twenty countries, process millions of transactions every year, and support thousands of ATM and POS terminals worldwide. Clients range from de novo community banks to multi-bank holding companies and processing centers.

CSF International ... What The World Is *Switching To*

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