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ChainStorePlus Application Package

User Operation Manual (v7.0)

Edition v1.2 (d202303)

The Book Four (5) Data Interfaces & Administration



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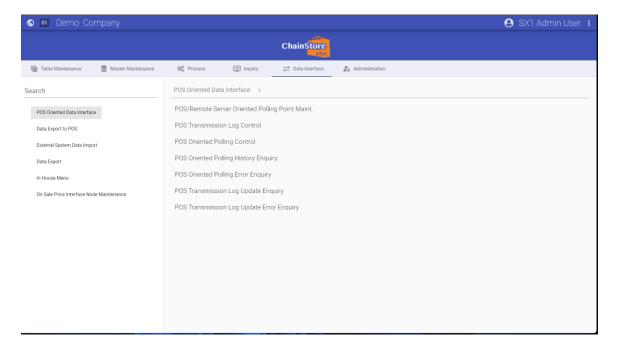
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SECTION 8 DATA INTERFACE

In this section, we will discuss different Data Interfaces available in the application package *ChainStorePlus*. In general, the package is come in 3 main categories in Data Interface:

- □ Interface for POS Terminals in Shops
- □ Interface for Data Import from Other Systems (**Optional**)
- □ Interface for Data Export to Other Systems (**Optional**)

The most used data interface in *ChainStorePlus* package is the Interface for POS Terminals in shops. This is the package's standard system background task used for controlling data upload and download between POS and the back-office Server System. This data transferring work is performed automatically by a special background communication task once submitted.



8.1 POS Oriented Data Interface

This is the convention polling method call from Server to POS client.

Before the POS Data Interface could work as expected in the system, user is required to set up proper POS Polling Point in the application Process "POS/Remote Server Oriented Polling Point Maintenance" below.

8.1.1 POS/Remote Server Oriented Polling Point Maintenance

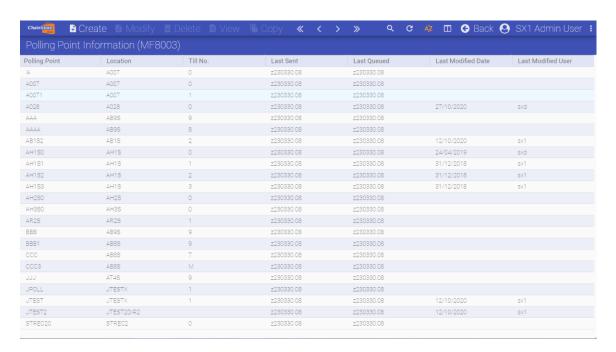
Objective:

Maintenance of the polling point of each remote shop for data interface

Functions: - 1. Create Record

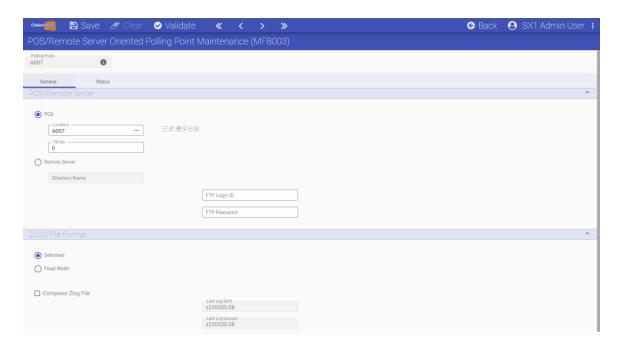
2. Modify Record

3. Delete Record



Screen Display:-

POS/Remote Server Oriented Polling Point Maintenance Screen ==>



Prompt	<u>Description</u>
POS Location	X(8) - Must field (if POS option selected) Location Code of the POS
Till No.	X(1) - Must field The machine ID of the POS
Remote Server	X(10) – Must Field (if Remote Server option selected) Remote Server Name
FTP Login ID	X(256) - Optional FTP Server Login ID of the POS
FTP Password	X(10) – Optional FTP Server Login Password
ZLOG File Format Delimited Fixed Width	Options Tab delimited Fixed length
Compress Zlog File	Zip the Zlog file if file size larger than a specific size

Last Log Sent Information field

The file name of the last log file sent

Last Log Queued Information field

The file name of the last log file queued

8.1.2 POS Transmission Log Control

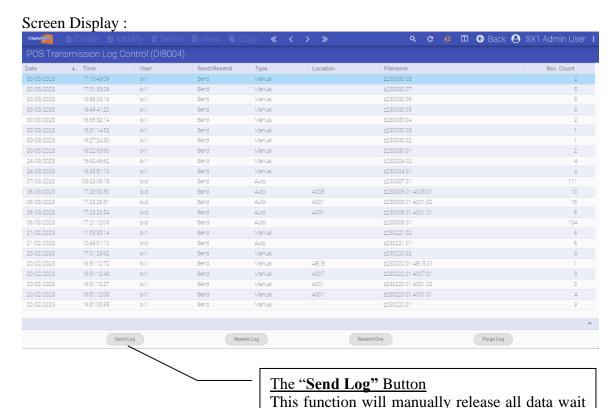
After we have properly set up the Polling Point of each POS, we now begin to understand what kind of information/data has been sent to POS via the back-office's background communication module.

The **ChainStorePlus** Back Office system will 'prepare' automatically all the related data changes in the server and sent to POS in shops automatically once available. Furthermore, user in the back office could make additional control over these transmission activities such as:

- send out data automatically(default), or
- sent manually now under user initiation, or
- * re-send data again from a specific date in case of necessary

A "Transmission Log File" which consists of all data sent history will be kept in the system and available to user for inquiry under **POS Transmission Log Control Process.**

In general, data changes like product items update, price changes, tables changes, and all other data that POS need to know are downloaded to POS either *Manually* or *Automatically* by a preset time. The time set up will be discussed under "Start/Stop Process" on the next page.



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to be sent from Server to POS and sent right the

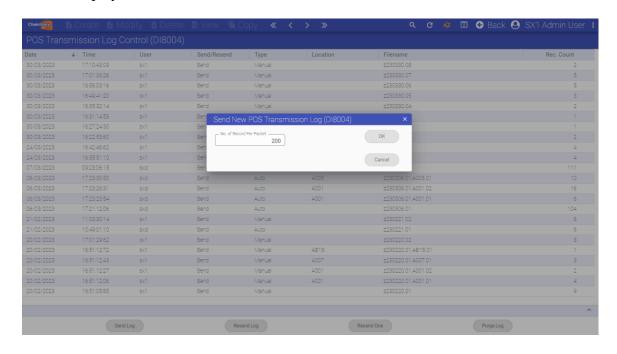
way after confirmation.

POS Transmission Log Control Screen ==>

Prompt	<u>Description</u>
Date	- The date of change data was sent
Time	- The time of change data was sent
User	- User who create the log file
Send/Receive	- Send and Receive flag
Type	 Send Type Manual – Manual Create Auto – Auto Create
Location	- Location specific log file
Filename	- Send log file name
Record Count	- Send log file record count

After clicked <u>"Send Log"</u> button, it will ask user to input the number of record per log file. Click "OK" button to confirm Log file generation.

Screen Display:



Prompt

Description

No. of Record Per Packet

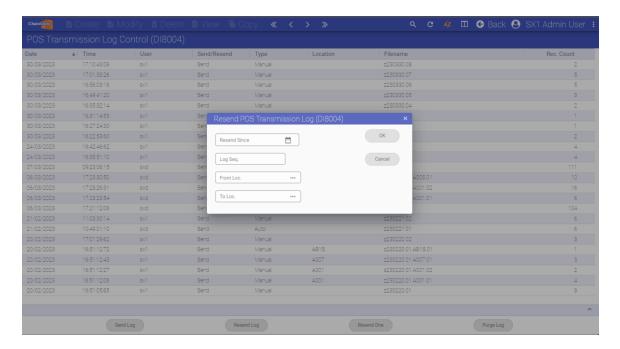
- The number of record per log file

The "Re-Send Log" Button

This function allows the user to re-send the downloading data once again from Server to POS start from a specific date and locations.

Screen Display:-

Re-send POS Transmission Log Control Screen ==>



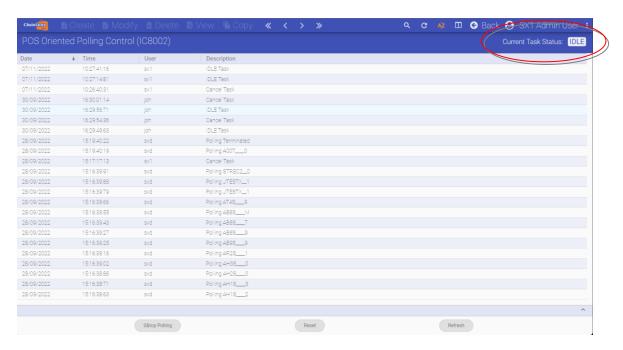
<u>Prompt</u>	<u>Description</u>
Re-send Since	Input the date dd/mm/yyyy; The system will re-sent the data from this date
Log Seq	The Sequence log number
From/To Loc	Send data to the locations in the From/To range

8.1.3 POS Data Polling Control

POS Data Polling Start/Stop Process

This is the process for Start Up or Shut Down a "Data Sending/Polling" job in the system. In order for the application to be able to perform Data Sending/Polling works between the Server and POS at shops automatically, user must first "Start Up" the sending/polling communication task in this process.

In certain circumstances, user may want to "Shut Down" this communication task for some reasons, such as Physical Stock Count, or maintenance job like Database Back Up etc. Additional functions of setting up sending log time or switching nodes, are also available in this process at user's choice.



There are a few task statuses will be shown in this status bar:

In progress - The background Polling communication task is in progress;

Just submitted - The background Polling communication is just submitted;

To be terminated - The background Polling communication task is now in termination;

Terminated - Background Polling task is terminated;

IDLE - Background Polling task is idle

The "Start Polling" Function

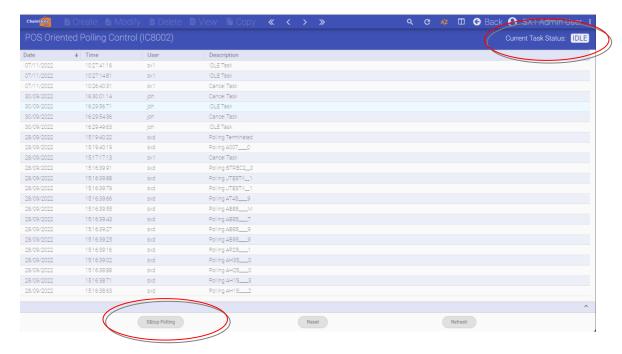
This polling task runs in the background and is triggered daily by a scheduled task. Once the task is executed, the task automatically and continuously looks into each store FTP folder one by one according to the polling point registered in the "POS/Remote Server Oriented Polling Point Maint." table. The task will transfer the POS uploaded files from FTP folders to the POS data folder for the posting process.

When the polling task is running normally, it will update the polling status and the last action taken in the POS Oriented Polling Control.

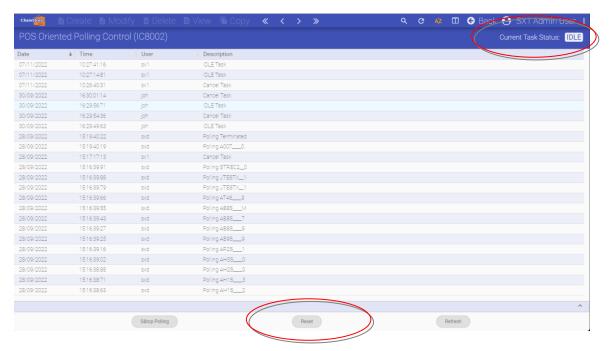
The "Stop Polling" Function

This function allows user to <u>Shut Down</u> the Polling/Sending Communication task in background for POS communication. This shut down function works only if the Communication task is in progress. Once shut down, the data exchange between Server and POS will not work any longer until the next start up.

As the "Stop Polling" button is pressed, the system will return the "To be terminated" status. The Current Task Status will change to "Terminated" when the task is stopped.

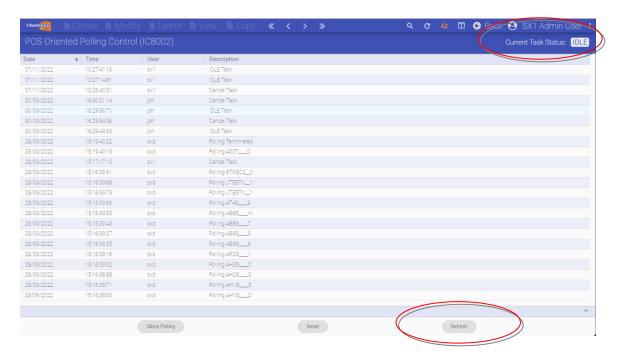


The "Reset" Function – Change the status to "IDLE" and the task is ready for Start Up again.



The "Refresh" function

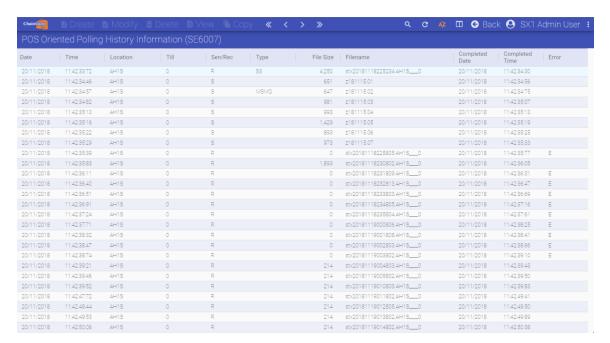
This allows the user to refresh the inquiry screen to display the latest status of the Communication Task.



8.1.4 Polling History Inquiry

This is a comprehensive real time inquiry screen for users to check on the latest communication activities and status of each POS in shops. It is recommended that the user should regularly visit this inquiry to make sure the data communication between Server and POS is working normally as expected. The polling status, polling time, records received/send, error codes if any, and explanation will be shown on screen for each call was made by the Server to POS.

Polling History Index Screen ==>



Prompt	Description
Date	- Polling date
Time	- Polling time
Loc.	- Shop/Store location code
Till	- The machine ID of POS
Sen/Rec	- Send (S) and Receive (R) flag
Type	- Polling Channel
File Size	- The file size of data file

File Name - The file name of data file

Completed Date - The completed date of the process

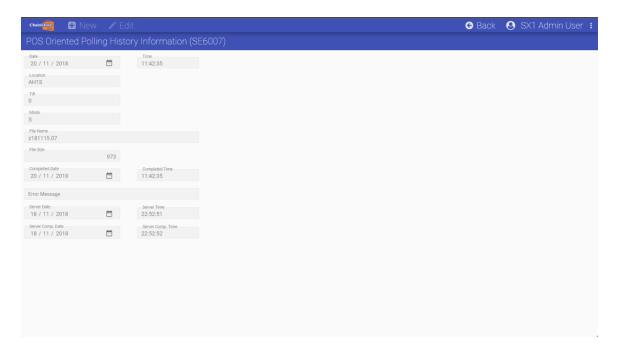
Completed Time - The completed time of the process

Error Message - 'E' = Error in that file process

- Blank indicate normal without error

Double click to the selected item from this inquiry screen, the following information page is displayed:

Polling History Detail Screen ==>



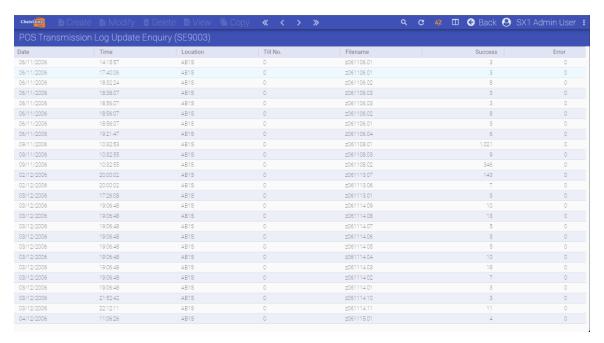
This is a detail information page for that particular polling process. The information is mainly used for tracking which file is processing and whether the task completed by the process in case of needed.

8.1.5 POS Transmission Log Update Inquiry

This is Inquiry for the Status of POS data update sent by Back Office.

Whenever POS received data file from back office for updating, POS will send back an Update Status to Back End server after data updated. This send back message will indicate whether the POS update is successful, or Error.

The Screen Display:

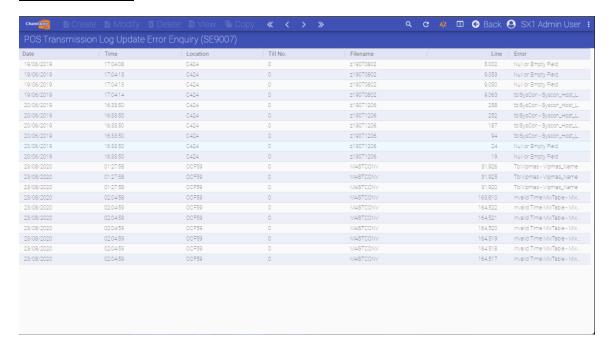


8.1.6 POS Transmission Log Update Error Inquiry

This is Inquiry for Error Status of POS data update sent by Back Office.

This Error Message gives user a brief message about the POS update error so back-office user could take proper action for data recovery if necessary.

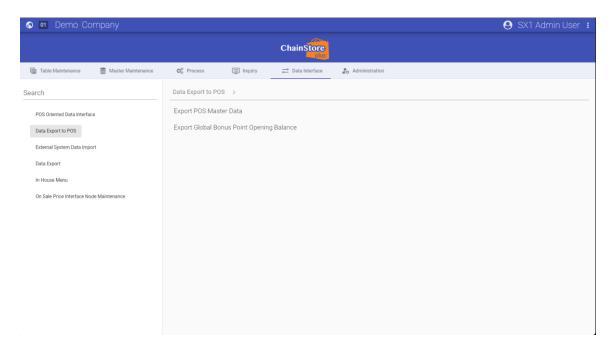
The Screen Display:

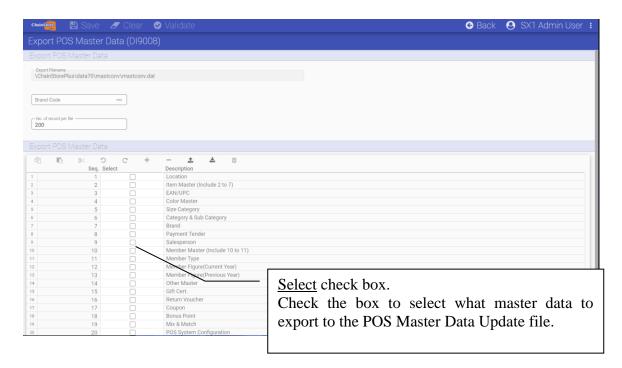


8.2 Data Export to POS

This process allows the user to send a most updated fresh copy of ALL master files that POS required from Back Office Server.

This is a manual process initiated by user on-demand. This is useful when you doubt the files integrity in POS, or in situation of re-building POS application & data from scratch.





Prompt

Brand Code

- X(10) Optional
- Export this brand item master to file only

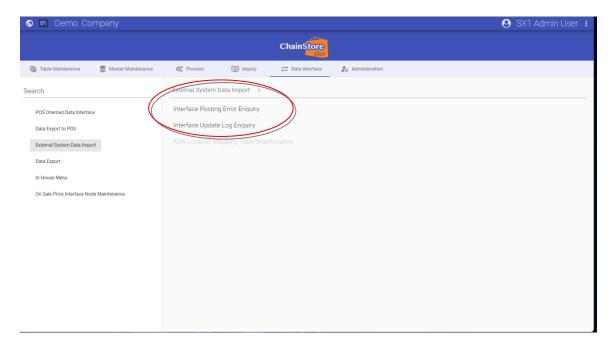
No. of record per file
- integer
- Maximum number of record export to the file

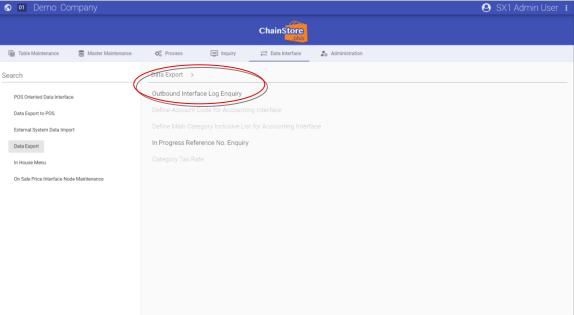
Select check box

- Check the boxes to select what master data to export

8.3 CS2000 Interface for Data Import & Export

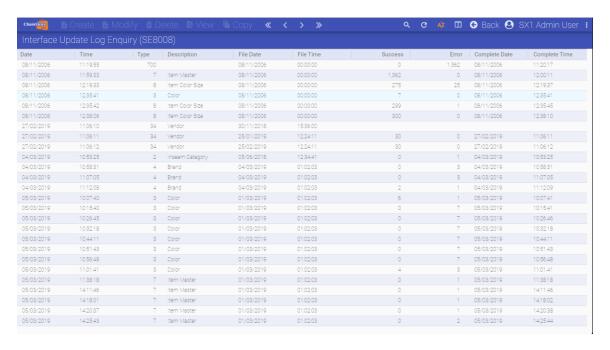
This is a Data Interface Module specialized for Data Exchange function between *ChainStorePlus* and the third-party software applications.





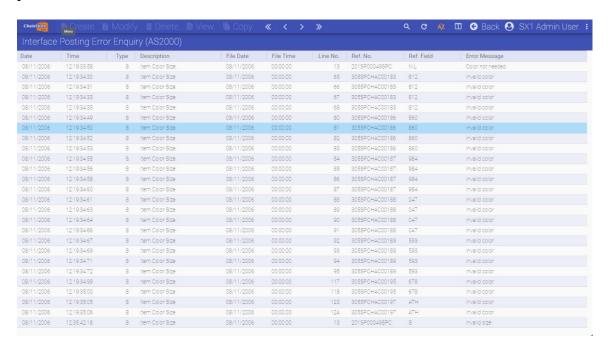
8.3.1 Interface Update Log Inquiry

This is the Inquiry screen for the Interface Update Log History. Users could get a detail update log history from this inquiry for Data Interface updating process.



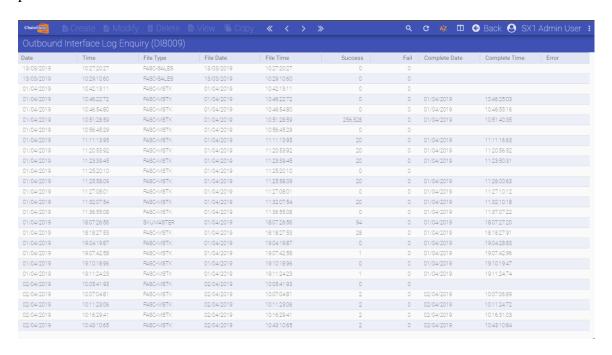
8.3.2 Interface Posting Error Enquiry

In this interface option, we provide an Inquiry screen for Interface Updating Error message in case of errors. Brief description of Error message will be displayed for user reference. Data recovery by user may be expected if error is found from the updating process.



8.3.3 Outbound Interface Log Enquiry

This is the Inquiry screen for the Outbound Interface Update Log History. Users could get a detail update log history from this inquiry for Outbound Data Interface updating process.

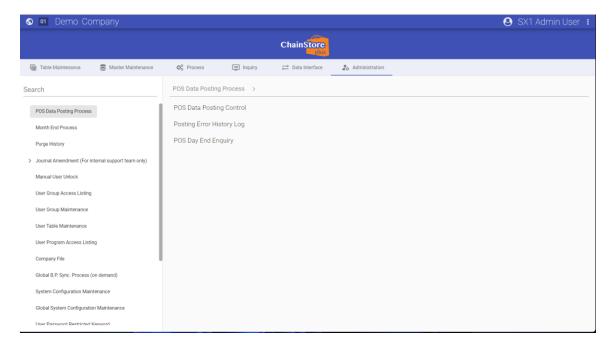


SECTION 9 ADMINISTRATION

In this section, we will discuss how we are going to handle those data polled back to Server from POS terminals as discussed in previous section.

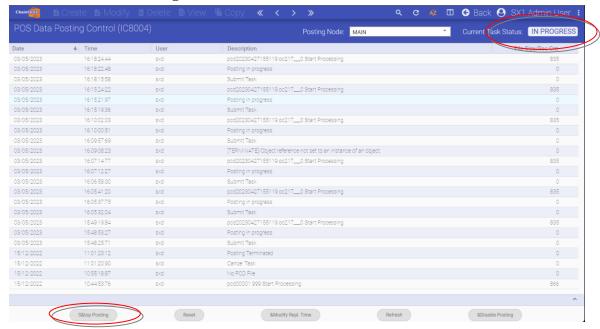
In the basic design of **ChainStorePlus**, all data is polled back to Back Office server from POS on *real time basis*. It means any activity that happened in **ChainStorePlus** POS will be sent back to back office server automatically in its shortest available moment. This *real time* action allows user able to monitor all POS activities including customer sales, inventory status, stock transfer, or other POS customer services available in back office.

In fact, this *real time* 'raw" data from POS has to be updated *immediately* to server database in order to provide timely information service to back-office users. This is the job of "**POS Data Posting Process**".



9.1 POS Data Posting Process

9.1.1 POS Data Posting Control



The "Current Task Status":

There are a few task statuses will be shown in this status bar:

In progress - The Posting task is in progress;

Just submitted - The Posting task is just submitted;

To be terminated - The Posting task is now in termination;

Terminated - The Posting task is terminated;

IDLE - The Posting task is idle

The "Start POSTING" Function

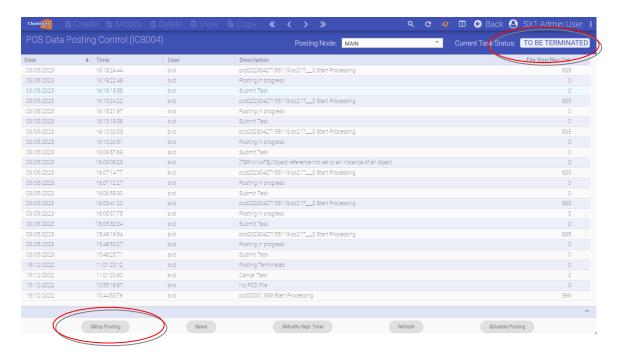
This Posting task runs in the background and is triggered daily by a scheduled task. Once the task is executed, the task works automatically to update data uploaded from POS. It will make POS *real time* data update to corresponding files immediately.

When the Posting task is running normally, it will update the posting status to "IN PROGRESS" and the last action taken in the POS Data Posting Control. The posting task will run non-stop until "STOP POSTING" is triggered by scheduled task or manual click the "Stop Posting" button.

The "STOP POSTING" Function

This function allows the user to <u>stop</u> the POSTING task in background for Data Updating. This function works only when the Posting task is in progress. Once stopped, the POS data will be no longer posted until the next start up.

As the "STOP POSTING" button is pressed, the system will respond as follows and data posting will stop.



The "Reset" function

This function allows the user to change the status to "IDLE" and the task is ready for Start Up again.

The "Modify Repl. Time" function

This function allows the user to change the stock replenish schedule.

The "Refresh" function

This function allows the user to refresh the inquiry screen to display the latest status of the Posting Task.

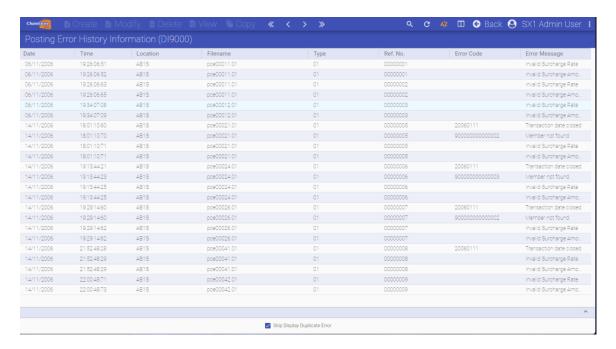
The "DISABLE/ENABLE POSTING" Function

This function allows the user to <u>disable/enable</u> the POSTING process for Data Updating. The Posting task is still running in background in this mode. But this function will suspend the data updating until the user clicks this button to enable the POSTING process again.

9.1.2 Posting Error History Log

This is an inquiry for checking Posting Errors from the data update of POS Data sent back to office real time everyday, if any. In general, if everything goes right, this inquiry box should be empty indicating NO ERRORS are found during POS data posting. However, it is possible that errors may be found in the posting job due to many reasons – such as some reference tables, records are missing from the system, or damaged records received etc... In some cases, the error message displayed may not be a "true error". It could be a warning message to alert users that unusual things happened during the updating. Consequently, the System Administrator needs to know these messages are the "true errors" and why it happened, or any subsequent support job need to follow regarding this message.

This is recommended that the System Administrator should check this inquiry at least once a day, or at the frequency that suits your own operation, to ensure that the data polled back is correctly updated and without errors.



Prompt	Description	
Date	- Posting Error Date	
Time	- Posting Error Time	
Location	- Posting Error Location	
Filename Type	The Error Record file nameThe Error Record Type	
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Ref. No. - The Reference No. of the record (if any)

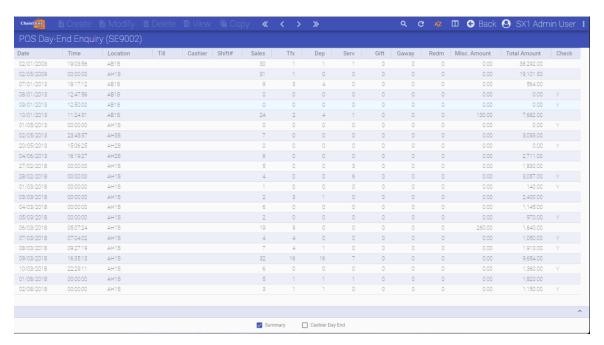
Error Code - The Error Reference Code (if any)

Error Message - The Error Message

9.1.3 POS Day End Inquiry

The POS Day End job is an important step for POS daily operation. This POS Day End Process is a daily routine done by POS personnel in the shop at business closing of the day. This serves the purpose of ending the POS current business day and preparing a new start for the next business day. It is important for the back-office Administrator to know all shops should have done this job properly on time.

This inquiry program records those day ends activities in shops. The shops will send automatically a day end message to Back Office once the Day End job is done. For the shops without Day End message in this inquiry of the day may imply missing Day End process from them. Further investigation is recommended for this missing cause.



Prompt	<u>Description</u>	
Date	- The Day End Date	
Time	- The Day End Time	
Location	- The Day End Location	
		ChainStorePlus v7 Book-5
		Edition 1.2 202303

Till - The machine ID of the POS

Cashier - The Staff Code of Cashier

Shift# - The Staff Code of Shift Cashier

Sales - The Number of Sales Transaction

Tfx - The Number of Stock Transfer Transaction

Dep - The Number of Deposit Transaction

Serv - The Number of Service Transaction

Gift - The Number of Gift Certificate Transaction

Gaway - The Number of Giveaway Transaction

Redm - The Number of Gift Redemption

Misc. Amount - The amount of miscellaneous income

Total Amount - The Total Income Amount

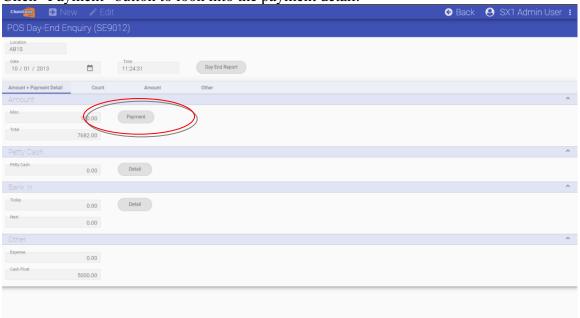
Check - Day End Check Flag

- Y = Day End Verified

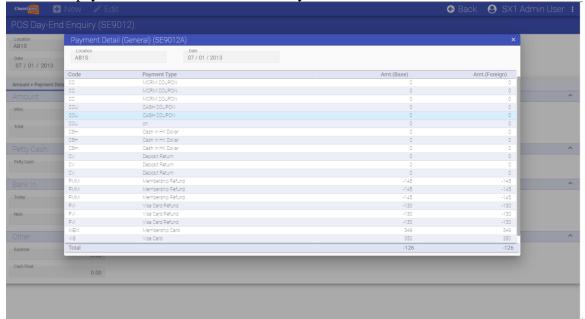
- Blank = Day End Not Verified

By double clicking the highlighted row will display the Day End transaction details as follows:

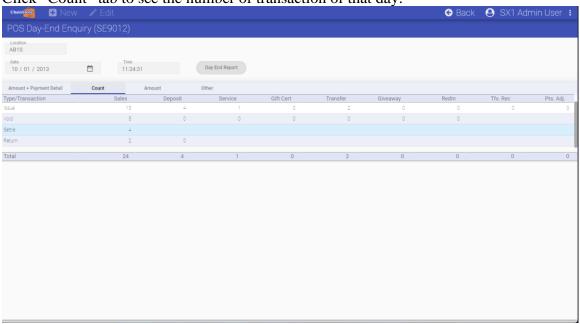
Click "Payment" button to look into the payment detail.



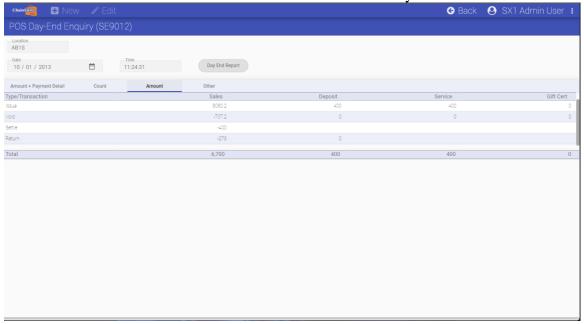
Shows the payment tender received of that day.



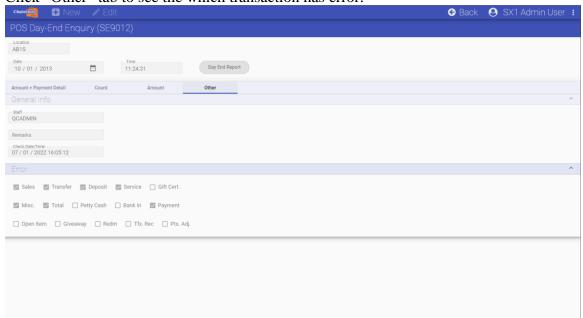
Click "Count" tab to see the number of transaction of that day.



Click "Amount" tab to see the amount of transaction of that day.



Click "Other" tab to see the which transaction has error.



- END OF BOOK (5) : ADMIN –