



-  *WinEPS Release Notes*
-  *Version 822*
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WinEPS Release Notes

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Section 1

822.0 SP1 Information

This section covers changes, bug fixes, and enhancements to the 822.0 SP1 release of WinEPS. The items listed below are the changes made only since the previous major release. Previous editions of the WinEPS Release Notes are located on the WinEPS installation CD, in the directory Documents/Old Release Notes, or contact WinEPS support for a copy.

The 822.0 SP1 Version is certified PCI Compliant. Refer to the WinEPS Users PCI Recommendations Guide for complete information of setting up a PCI compliant environment.

Minimum System Requirements

If the minimum requirements for the operating system you are using are higher than what is listed below, use those requirements instead.

Hardware Requirements for WinEPS and OpenEPS

- Pentium III (Intel or compatible) 500 MHz processor (1 GHz or faster recommended)
- 256 MB of RAM (512 MB or more recommended)
- VGA, or higher, resolution monitor set at 800 x 600 or better
- CD-ROM drive for software installation
- Ethernet Card
- Drive Space Requirement for WinEPS server:
 - 600 MB of available hard disk space on the WinEPS server (1.5 Gb of drive space is recommended). WinEPS requires approximately 300 Mb of space to install to; in addition a busy store can generate up to 10 Mb of log files per day. The default of 30 days storage can use up to 300 Mb of extra space resulting in the minimum requirement of 600 Mb of drive space.
 - 30 Days of log retention requires a total of 600 Mb free Hard Drive space.
 - 60 Days of log retention requires a total of 900 Mb free Hard Drive space.
 - 90 Days of log retention requires a total of 1.2 Gb free Hard Drive space.
- Drive Space Requirement for OpenEPS on each POS lane:
 - 100 Mb free drive space for configuration files and logs

Software Requirements for WinEPS

- TCP/IP, FTP and FTPS Protocols
- Any of the following Operating Systems:
 - Microsoft Server 2000/2003 SP 1
 - Microsoft Windows 2000, SP 4
 - Microsoft Windows XP SP2, Professional

Software Requirements for OpenEPS (Front POS Lanes):

- TCP/IP, FTP and FTPS Protocols
- Any of the following Operating Systems:
 - Microsoft Server 2000/2003 SP 1
 - Microsoft Windows 2000, SP 4
 - Microsoft Windows XP SP2, Professional
 - Windows XP Embedded
 - WePOS
 - Linux [These versions only]: Red Hat version 2.4.7-10; Fedora version 2.4.20

PCI Compliance and Operating Systems

PCI requires that the security patches for software in the payments environment be tested and installed in a timely fashion. Several Microsoft operating systems have past their supported security update lifespan, and no additional security patches will be released. These operating systems include Windows NT 4.0 and Windows 95/98.

Due to the vulnerability that a lack of security patches represents, these operating systems are no longer supported for use with the WinEPS/OpenEPS product suite. Only the operating systems listed under the [Software Requirements](#) section above are supported.

Refer to information at <http://support.microsoft.com/> for the most up to date security related articles and end of support dates for all Microsoft operating systems.

Unsupported Systems

The following operating systems and hardware are **not supported**:

- Windows NT 4.0 is no longer supported (See PCI compliance section above)
- Windows Win95/Win98 is no longer supported (See PCI compliance section above)
- WinEPS will not function on non NT-based Windows versions, such as Windows ME.
- XP Home version is **not** supported due to its limited scope.

- Windows Vista operating system is not currently supported; this operating system is being researched for future support options.
- 64 bit operating systems and processors are not currently supported; these are being researched for future support options.

Code Versions

WinEPS Versions:

Module	Version
EPSEngineSrv.Exe	822.0.0.48
EPSMenu.Exe	822.0.0.41
Rpt.Exe	822.0.0.3

OpenEPS Versions:

Module	Version	Date
mtx_eps.dll	822.0.0.251	6/8/2007
mtx_pos.dll	822.0.0.1	2/1/2007
libmtx_eps.so	822.0.0.410	6/11/2007
libmtx_pos.so	822.0.0.1	2/22/2007

Terminal Code Versions:

Type	Terminal	Version	Date
SCAT / Script / Terminal Code	C2000	32	1/5/2005
	eN-Crypt 2100	2.01	1/20/2003
	eN-Touch 1000	06.06	1/20/2003
	Everest	40	8/15/2006
	HYP 4100	232	1/25/2007
	ICE 5500	115	2/19/2007
	ICE 6000	115	2/19/2007
	L4250	232	1/25/2007
	Mx830/Mx850	210G	3/13/2007
	MX870	210G	3/13/2007
	NCR 5993	11	11/29/2005
	Omni 490	58	3/2/2006
	Omni 7000	44	1/22/2007

Stand Beside Code Versions:

Type	Terminal	Version	Date
Stand Beside	C2000	45	8/17/2004
	Everest	383	5/5/2005
	Omni 490	379	2/18/2005
	Verifone Omni 3750	17	5/25/2007

Known Issues

IBM Issue with Large ECC Text

The IBM integration was discovered to have difficulty with the new, larger, ECC receipt text format. When an ECC transaction is attempted, the IBM cannot handle the additional receipt text length.

This issue will be corrected in WinEPS version 823.0.

Verifone Mx800 series issue

This issue applies to the Verifone MX830/850/870 terminals.

Linux Loading Issue

Linux environment currently does not support loading of FormAgent or ScreenFiles to the Mx800 terminals. MTX is working on a fix for this issue which should be available shortly; contact MTX support for information regarding this patch and when it will be available.

At this time, manual loading of the terminals on a Windows machine is recommended before use on a Linux based POS.

WinEPS Fixed Issues and Enhancements

Enhancement	Description
1. PCI Recertification	<ul style="list-style-type: none"> • Notice • WinEPS has undergone the yearly recertification required to maintain PCI compliance. WinEPS continues to be a PCI certified software suite. • For additional information on PCI, refer to the WinEPS Users PCI Recommendations Guide.
2. Masking DL Track 2 data in logs	<ul style="list-style-type: none"> • Enhancement • To enhance customer privacy, track data from swiped Driver's Licenses will be masked in all WinEPS/OpenEPS log files.
3. Automatically decline Blackhawk Redemptions	<ul style="list-style-type: none"> • Enhancement • WinEPS does not support redemptions for Blackhawk Gift Cards. To allow WinEPS to differentiate between Blackhawk and non-Blackhawk cards, WinEPS cues off of the Program ID field. • If a prefix is set with any program ID, WinEPS considers it a Blackhawk card and will decline any redemption for a Gift Card with that prefix. • The Program ID field has been expanded to be available for all hosts. • Full details on this feature are included in Section 2.
4. Support the Mx850/830 terminals	<ul style="list-style-type: none"> • Enhancement • WinEPS supports the use of the Mx850/830 terminal type. • Full details on this feature are included in Section 2.
5. Verify Track2 same as PAN on NI responses	<ul style="list-style-type: none"> • Enhancement • To adhere to PCI requirements relating to not retaining the track2 data and the PIN block, voids of previous transactions can receive an NI response which requires the re-swipe of the card and the re-entry of the PIN number. • On NI responses, WinEPS now verifies that the re-swiped card number matches the retained information about the card from the initial transaction. If the cards do not match, the void is declined.
6. Offline Purchase with Void, not sent to host	<ul style="list-style-type: none"> • Fixed • If both a purchase and a void of that purchase are taken offline, WinEPS will send neither of the transactions up to the host. This was not working correctly and both the purchase and void were being forward onto the host; this issue has been fixed.

Enhancement	Description
7. Visa Fleet cards	<ul style="list-style-type: none"> • Enhancement • Visa Fleet has been added as a new fleet type. • Upgrades and fresh installations will have a new card profile for Visa Fleet. • The following ranges are added to the Fleet Card prefix table: <ul style="list-style-type: none"> 448XXXXXX VF 480XXXXXX VF
8. Verify WinEPS use with the new Daylight savings patch from Microsoft	<ul style="list-style-type: none"> • Testing • Due to the new change in Daylight savings time, and the associated patch from Microsoft, WinEPS has been tested to verify that this change will not have any impact on WinEPS processing. • Daylight saving time now starts on the second Sunday in March.
9. Corrected pin block on gift card	<ul style="list-style-type: none"> • Fixed • Fixed an issue where the pin block was incorrectly added to a gift card transaction if the previous transaction was a debit.
10. Activation logic updated	<ul style="list-style-type: none"> • Fixed • WinEPS activation logic has been updated to account for changes in machine and Windows generated SID numbers. Prior versions would fail and reprompt for a WinEPS activation key if an item such as the PC's administrator name was changed.
11. Declined Transaction report format	<ul style="list-style-type: none"> • Fixed • The formatting of the Declined Transaction report was incorrect and caused extra characters to be pushed to the next line of each entry making the report appear to be "double-spaced". This report module now correctly prints one line per entry on this report.

OpenEPS Changes

Enhancement	Description
<p>1. New OpenEPS Calls: StoreNumber & UserID</p>	<ul style="list-style-type: none"> • Enhancement • Two new calls have been added to OpenEPS to allow setting the Store Number and the User ID: MTX_POS_SET_StoreNumber MTX_POS_SET_UserID • These additional calls have been added to support the new command line features in Virtual Terminal that allow the setting of Store Number and the User ID • These functions are for use with Virtual Terminal only.
<p>2. OpenEPS Receipt Generation</p>	<ul style="list-style-type: none"> • Enhancement • To support a direct connection from OpenEPS to ServerEPS, some additional functionality that WinEPS usually supplies needed to be added to OpenEPS. • OpenEPS has been updated to create full receipt information on its own instead of requiring WinEPS to send the receipt information. • OpenEPS will generate its own receipt if the response message contains the proper flag, and does not contain receipt data.
<p>3. Card Processing Profiles checked at OpenEPS</p>	<ul style="list-style-type: none"> • Enhancement • To support a direct connection from OpenEPS to ServerEPS, some additional functionality that WinEPS usually supplies needed to be added to OpenEPS. • OpenEPS has been updated to verify all card processing profile settings at the lane before sending a transaction to WinEPS or ServerEPS.
<p>4. Fixed buffering of check data</p>	<ul style="list-style-type: none"> • Fixed • OpenEPS was incorrectly buffering check data from the first check transaction processed on a lane each day. • If the buffered check data contained invalid MICR data, all subsequent check transactions would have the invalid MICR data.
<p>5. No override allowed on NP declines</p>	<ul style="list-style-type: none"> • Fixed • An NP decline is a soft decline indicating that a new PIN number must be entered by the customer. While the decline is technically a soft decline, the POS may not override it, and the customer must supply the requested PIN to continue. • Since overrides are not allowed for this decline, if a POS attempted to set the override flag, OpenEPS will reverse the setting and continue the transaction as normal, waiting for a reset or PIN entry.

Enhancement	Description
6. Biometrics configuration interfering with getting card data from POS	<ul style="list-style-type: none">• Fixed• If the terminal configuration was set up with both Biometrics and 'Card Reader Attached to POS', a failed card read should result in acquiring the Track2 data from the POS. However, OpenEPS was skipping that step, and allowed the transaction to complete without a card number being entered. The transaction was then automatically declined due to missing card data.• This issue has been corrected so that OpenEPS sets Track2 data as a requirement from the POS if the configuration is set up to allow the POS to provide it.

OpenIP Changes

Enhancement	Description
1. -No Change to OpenIP -	<ul style="list-style-type: none"><li data-bbox="553 394 630 415">• ---

Host Changes

ACI

Enhancement	Description
1. Host settlement bucket correction	<ul style="list-style-type: none"> Fixed Corrected an issue found in the host settlement message where settlement totals for incorrect buckets were being sent to ACI at day close.
2. ACI Tor forwarding	<ul style="list-style-type: none"> Fixed Previously, TORs forwarding to the ACI host was only attempted 5 times before the TOR was deleted. This has been changed so that forwarding is attempted 120 times before a TOR is deleted. TORs are still deleted at the end of the processing day during the End of Day procedure.

Albertsons

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Ascendent

Enhancement	Description
1. EJ response mapping corrected	<ul style="list-style-type: none"> Fixed The EJ response code in the Ascendent response code table was previously mapped to an NO terminal response. This has been modified to an NP response.

BioPay

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Chase

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Concord: EPC

Enhancement	Description
1. Settlement date change	<ul style="list-style-type: none"> Enhancement “Totals Date” field in the Concord EPC host settlement message has been updated to send a hard coded value of 222222 (6 2’s). Previously the current date was set in the “Totals Date” field.
2. Updated message specification	<ul style="list-style-type: none"> Fixed WinEPS has been updated with a Concord EPC host specification change; previous to the update, the change in messaging was causing an incorrect display of the remaining Balances on EBT Food and Cash Combo Cards.

Concord: H&C Format

Enhancement	Description
1. RFID full track data to Concord H&C	<ul style="list-style-type: none"> Fixed WinEPS was incorrectly not sending the full track 2 data for credit cards to the Concord H&C host when the card was read by RFID; instead it was sent as if the card had been manually entered. This has been corrected to send the full track data.

Concord: Memphis

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Demo

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

ePicTranz

Enhancement	Description
1. Print PO on Receipt	<ul style="list-style-type: none"> Enhancement A new option has been added to the ePic Tranz host screen: Print PO# on Receipt. If checked, any transaction that includes a purchase order number (TAC 4 – PO Number) will print that PO number on the receipt.
2. Send UPC when supplied	<ul style="list-style-type: none"> Enhancement If the UPC number is set during a transaction, it will be passed to the ePic Trans host. The UPC will be passed as part of Bit 62, Table 74.
3. Send Cashier Number with each transaction	<ul style="list-style-type: none"> Enhancement The cashier number is passed to the ePic Trans host for every transaction. Previously the checker number was not sent. Clerk Id / Cashier # is passed as part of Bit 62, Table 47.
4. Credit to Debit success indicator	<ul style="list-style-type: none"> Enhancement The ePic Tranz host has been updated to allow the passing of the success or failure of a credit to debit conversion. When a credit to Debit conversion is attempted a flag is set which indicates the outcome of the attempted conversion. This flag will be placed in Bit 63, Table 47: <ul style="list-style-type: none"> C – Indicates a CrToDBtoCR (failed Credit to Debit) D – Indicates a CrtoDB (success) A 'C' indicates that credit to debit was attempted, but it was converted back to credit.
5. Added ECC lines	<ul style="list-style-type: none"> Enhancement Removed 2 extra lines of text on the receipt (the credit card merchant agreement lines) to make room for an additional 2 lines of ECC disclaimer text necessitated by the NACHA requirements.

GlobalPay

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

LML

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Lynk

Enhancement	Description
1. Automatic decline for unsupported lanes	<ul style="list-style-type: none"> Enhancement Updated Lynk host module will decline transactions sent to WinEPS from lanes 94 through 99 as those lane numbers are not supported by the Lynk host.

LX1 and LX2 Hosts

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Mainsail

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Mercury

Enhancement	Description
1. Mercury dial backup	<ul style="list-style-type: none"> Enhancement WinEPS supports the use of dial (modem) backup to the Mercury host. Setting up dial backup requires the installation of the ActiveX DSIClient as found on the WinEPS installation CD in the \Tools\Mercury Host DSI Installer\ folder. Also, the IP/Dial Bridge XML must be installed from the disk that is shipped with the modem, and must also be configured.
2. Mercury Host Backup IP configuration	<ul style="list-style-type: none"> Fixed Fixed Mercury host screen to allow modification of both the Primary and Secondary IP address lines. Previously the Secondary IP address was not configurable.
3. Update WinEPS version sent to Mercury	<ul style="list-style-type: none"> Updated The WinEPS version number sent to the Mercury host has been updated to reflect the current WinEPS version.
4. Mercury Host Single-Threaded work around	<ul style="list-style-type: none"> Enhancement The Mercury ActiveX control has been determined to be single threaded, which means there can only be one transaction processing at a time. If a transaction is currently outstanding, an attempt to send a new transaction will result in an error code of 003002 being returned to WinEPS from the ActiveX control. To compensate for this, WinEPS will queue up transactions pending to go out to the host.

MPS (Fifth Third)

Enhancement	Description
1. MPS TOR message format change	<ul style="list-style-type: none"> Fixed When processing offline and a TOR was created, bit 90 was populated with the first 2 digits of the date; this caused MPS to decline the transaction. Bit 90 is now set to all zeros.

MTX Receipt Capture Host

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

NOVA

Enhancement	Description
1. Nova Host Module specification update	<ul style="list-style-type: none"> Enhancement The NOVA specification now allows 80 characters of RAW MICR data. The Host DLL has been updated to truncate the RAW MICR data to the first 80 characters. Previously the limit was 37 characters.
2. Nova supports cash back on check	<ul style="list-style-type: none"> Enhancement NOVA host now supports Cash Back for check transactions.
3. Nova supports RFID	<ul style="list-style-type: none"> Enhancement RFID now supported to the NOVA host. Previously, during RFID transaction WinEPS wasn't setting bit 22 as '91' for 'Proximity Mag Stripe Read' but setting it as '90' for 'Unaltered Mag Stripe Read.'

Paypoint

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"> ---

Pay by Touch

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"><li data-bbox="570 373 639 401">• ---

Shared (BigY)

Enhancement	Description
1. -No Change to Host -	<ul style="list-style-type: none"><li data-bbox="570 728 639 756">• ---

Terminal Code Changes

Hypercom ICE5500

Enhancement	Description
1. SCAT Version 115 for Hypercom ICE terminals	<ul style="list-style-type: none"> • Enhancement • The latest SCAT code version 115 contains enhancements for WIC processing.

Hypercom ICE6000

Enhancement	Description
1. SCAT Version 115 for Hypercom ICE terminals	<ul style="list-style-type: none"> • Enhancement • The latest SCAT code version 115 contains enhancements for WIC processing.

Hypercom L4100

Enhancement	Description
1. New Hypercom 4100 Screen Files	<ul style="list-style-type: none"> • Fixed • There was a problem after upgrading the SCAT code on the 4100 terminal where the screen files would not load correctly. This would cause a "Form not Found" error on the terminal when the lane was signed on. The latest screen files fix this issue.

Hypercom L4250

Enhancement	Description
1. 4250 SCAT code version 232	<ul style="list-style-type: none"> • Fixed • The latest SCAT code for the 4250 corrects an issue where the RFID reader was being left active when using triple language or Biometrics. This was causing distorted signatures when signing on the PIN pad.
2. New Hypercom 4250 Screen Files	<ul style="list-style-type: none"> • Fixed • There was a problem after upgrading the SCAT code on the 4250 terminal where the screen files would not load correctly. This would cause a "Form not Found" error on the terminal when the lane was signed on. The latest screen files fix this issue.

Ingenico eN-Crypt 2100

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> • ---

Ingenico eN-Touch 1000

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> • ---

Ingenico 6550

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> • ---

IVI C2000 Protégé

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> •

NCR 5993

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> •

Verifone Everest

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> •

Verifone MX830/MX850

Enhancement	Description
1. Support the Mx850/830 terminals	<ul style="list-style-type: none"> • Enhancement • WinEPS supports the use of the Mx850/830 terminal type. • Full details on this feature are included in Section 2.
2. Support RFID w/ Mx870	<ul style="list-style-type: none"> • Enhancement • The MX870 supports the use of RFID. • Due to its use of forms, the MX870 cannot distinguish between RFID types, and will report a generic RFID type. This does not impact its ability to receive track data from the RFID.
3. MX870/850/830 changes	<ul style="list-style-type: none"> • Fixed • The following issues were corrected based on the results from the pilot phase of the Mx830 terminal. • Changed button property to “stay pressed” • The Baud Rate for communication was reduced to 38400. • The terminal code was updated to make COM port 3 the default for the connection port on the cabling dongle. • Corrected an issue where multiple button presses caused a crash. • Corrected an issue where Card Slide & Button Press caused a crash • ExtractString re-written to not use memory pointer, as it caused a crash.

Verifone MX870

Enhancement	Description
1. Support RFID w/ Mx870	<ul style="list-style-type: none"> • Enhancement • The MX870 supports the use of RFID. • Due to its use of forms, the MX870 cannot distinguish between RFID types, and will report a generic RFID type. This does not impact its ability to receive track data from the RFID.
2. MX870/850/830 changes	<ul style="list-style-type: none"> • Fixed • The following issues were corrected based on the results from the pilot phase of the Mx830 terminal. • Changed button property to “stay pressed” • The Baud Rate for communication was reduced to 38400. • The terminal code was updated to make COM port 3 the default for the connection port on the cabling dongle. • Corrected an issue where multiple button presses caused a crash. • Corrected an issue where Card Slide & Button Press caused a crash • ExtractString re-written to not use memory pointer, as it caused a crash.

Verifone Omni 490

Enhancement	Description
1. -No Change to Terminal Code -	<ul style="list-style-type: none"> • ---

Verifone Omni 7000

Enhancement	Description
1. Omni 7000 SCAT Code Version 44	<ul style="list-style-type: none"> • Fixed • The latest SCAT code for the 7000 corrects an issue with the soft keys becoming inactive following a signature capture.

Stand Beside Code Changes

IVI C2000 Protégé

Enhancement	Description
1. -No Change to Stand Beside Code -	<ul style="list-style-type: none">• ---

Verifone Everest

Enhancement	Description
1. -No Change to Stand Beside Code -	<ul style="list-style-type: none">• ---

Verifone Omni 490

Enhancement	Description
1. -No Change to Stand Beside Code -	<ul style="list-style-type: none">• ---

Verifone Omni 3750

Enhancement	Description
1. 3750 Enhancements	<ul style="list-style-type: none"> • Enhancement • The 3750 interface had been improved by adding support for additional features and Terminal Action Codes • The MagTEK Mini MICR reader may be used with the 3750 to supply check data. • The following additional TACs are now supported: <ul style="list-style-type: none"> b – Verify Card g – Fee Amount n – Verify Customer Name p – UPC Code z – Zip Code J – Phone Number K – Tax Amount
2. Include ECCRecINFO.xml file in 3750 config file	<ul style="list-style-type: none"> • Enhancement • The ECCRecINFO.xml file is now automatically included in the Config.Zip file that is created and downloaded to the 3750 upon sign on.
3. New 3750 Stand Beside code	<ul style="list-style-type: none"> • Fixed • The latest code corrects the following two issues: <ul style="list-style-type: none"> • When using the 'L' customer okay amount TAC, if the total amount was 9 cents or less, the 3750 would freeze on the 'L' TAC. • The 3750 was not passing the cash back amount in bit 054 for check purchases correctly.

External Program Changes

Engine Monitor and Tray Icon

Enhancement	Description
1. -No Change to Engine Monitor and Tray Icon -	<ul style="list-style-type: none"> ---

Host Simulator

Enhancement	Description
1. -No Change to Host Simulator -	<ul style="list-style-type: none"> ---

IBM Integration

Enhancement	Description
1. MultiEPS setting incorrect Primary ID for Check	<ul style="list-style-type: none"> Fixed MultiEPS was incorrectly setting the Primary ID during Check processing as just the account number. This has been corrected so that the Primary ID is set to the full MICR data in TA format.

OMNI 7000 Scanmaster Code

Terminal code for the Scanmaster system is written and maintained by Concord. It is distributed on the WinEPS installation CD for convenience only.

Enhancement	Description
1. OMNI 7000 ScanMaster terminal code Version 1.6	<ul style="list-style-type: none"> • Tested • Verified the functionality of the latest ScanMaster terminal code of the OMNI 7000.

Redundancy Service

Enhancement	Description
1. -No Change to Redundancy Service -	<ul style="list-style-type: none"> • ---

UpdateFiles.Exe

Enhancement	Description
1. -No Change to UpdateFiles.Exe -	<ul style="list-style-type: none"> • ---

Virtual Terminal 2

Enhancement	Description
<p>1. New VT Command Line parameters: Store# and UserID</p>	<ul style="list-style-type: none"> • Enhancement • Two new command line parameters have been added to Virtual Terminal, along with a revision of entry format for older parameters. • The new parameters are: STORE USER • For information on all VT2 command line parameters refer to the Virtual Terminal 2 User's Guide. • Full details on this feature are included in Section 2.
<p>2. VT2 Supports MagTEK MINI check reader</p>	<ul style="list-style-type: none"> • Enhancement • Virtual Terminal supports the use of the MagTEK MINI check reader. With this reader attached, VT can acquire RawMICR information. • Full details on this feature are included in Section 2.
<p>3. VT not use POST Transaction Number in Citrix environment</p>	<ul style="list-style-type: none"> • Enhancement • In the Citrix environment multiple copies of VT2 will be running out of the same OpenEPS directory. VT2 typically stores the next POST transaction ID number to use in the vt2setup.xml file. • To prevent a collision in the multiple VT environment, the use of the POST Transaction numbers is turned off whenever VT receives a Store Number setting in its command line. In the Citrix environment, the Store number will always be set through the command line option.
<p>4. VT2 Log file for Errors and Exceptions</p>	<ul style="list-style-type: none"> • Enhancement • Virtual Terminal now creates a separate log file in the OpenEPS directory for VT errors. • VT2 does not have direct access to the OpenEPS JRNL files, therefore it will create its own log file to log errors in the command line parameters and Exception errors while processing. • The log file name is VT2JRNL.TXT

Enhancement	Description
<p>5. Add Lane# and/or store# to laseqno & recpt.txt</p>	<ul style="list-style-type: none"> • Enhancement • In the Citrix environment multiple copies of VT2 will be running out of the same OpenEPS directory. • VT2 stores the last sequence number used in the laseqno.eft file and the information for the receipt in the recpt.txt file. These files had to have additional differentiation in a multiple-VT environment. • To prevent a collision in the multiple VT environment the laseqno.eft file adds the store number and lane number into the file name and the Store number into the recpt.txt file: <pre>laseqnoSSSSSSSSLLLLL.eft recptSSSSSSSS.txt</pre> <p style="text-align: center;">Where S is the store number and L is the lane.</p> • Since the receipt header and footer information is stored in the receipt file, and that file now has an associated store number, each store location must have a receipt file created for it manually.
<p>6. Decimal point added to amount field in VT2</p>	<ul style="list-style-type: none"> • Enhancement • To increase the readability, a decimal point is now included on screen when entering dollar amounts. This decimal point makes it easier for a cashier to determine what dollar value has been entered.
<p>7. VT allows 6 digits for auth number</p>	<ul style="list-style-type: none"> • Enhancement • Authorization Numbers for voice authorizations (Force transactions) are exactly 6 digits in length. Virtual Terminal has been updated so that when an Authorization Number is requested, a full 6 digit number must be entered.
<p>8. VT Supports the CT-S2000 Printer</p>	<ul style="list-style-type: none"> • Enhancement • Virtual Terminal supports the use of the CT-S2000 Thermal Printer by Citizen Systems. • Typically, Virtual Terminal uses a standard full size PC printer to print receipts; the CT-S2000 is a small size receipt-only printer that can be attached to the PC running Virtual Terminal. • To use the CT-S2000 with Virtual Terminal, simply install it as a Windows Printer and set it as the default printer for the PC running VT.
<p>9. Limit PO Number to 12 digits</p>	<ul style="list-style-type: none"> • Enhancement • The PO number field has been limited to allow entry of only 12 digits. This change was to bring this field in line with the OpenEPS specification which limits Purchase Order numbers to 12 digits.

Enhancement	Description
10. VT Format change caused check issue	<ul style="list-style-type: none">• Fixed• A format change to the purchase amount screen reintroduced a previous issue with proceeding two check transactions in a row. The latest version of VT fixes the issue and maintains the new formatting.

Section 2

New Features

[WinEPS Fixed Issues and Enhancements #3:](#)

Decline Blackhawk Redemptions

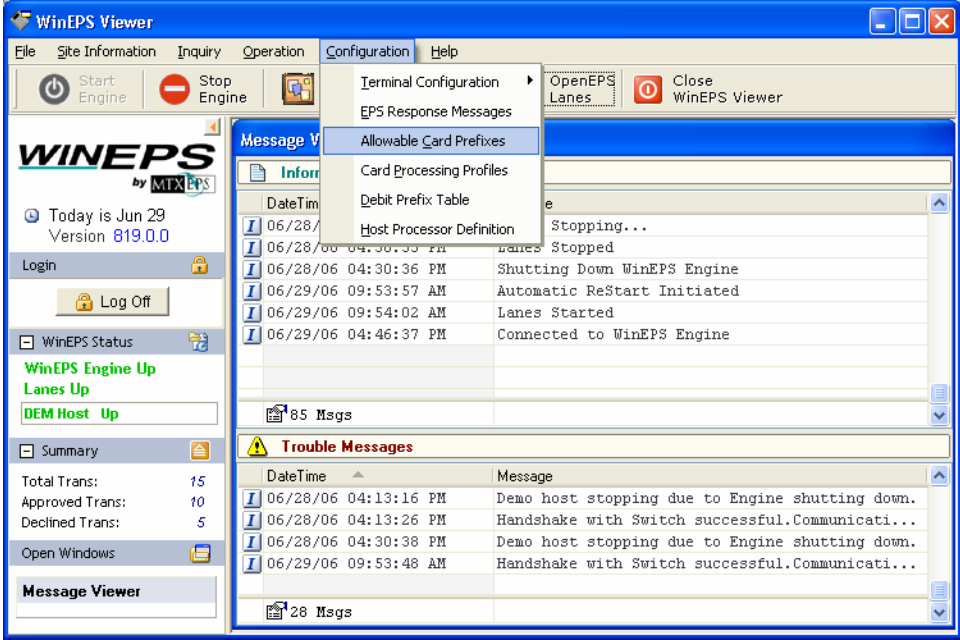
Blackhawk Prefix Setup

Blackhawk cards are activated in one of two ways: One Pass, which entails just a barcode scan of the 128 length barcode, or Two Pass, which requires the scan of a shorter barcode plus the swipe of the magnetic strip on the card. These methods are used to supply WinEPS with both the UPC and the card number.

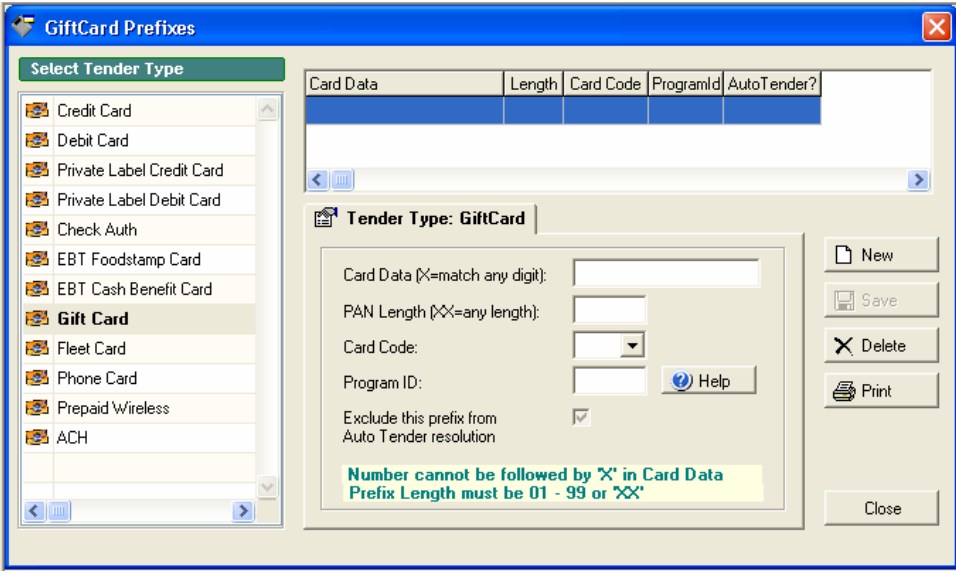
When running Blackhawk cards, Blackhawk gift card prefixes must be specified. Each Blackhawk gift card prefix must have a Program ID set; the program ID is often specified by the Gift Card processing host, and is used to differentiate between Blackhawk cards and non-Blackhawk cards. Since WinEPS does not support Redemption for Blackhawk gift cards, WinEPS will decline any redemption attempted with a card prefix that has any Program ID set.

Follow the steps below if using Blackhawk cards along with Auto-Tender Type or other prefix table specific WinEPS features.

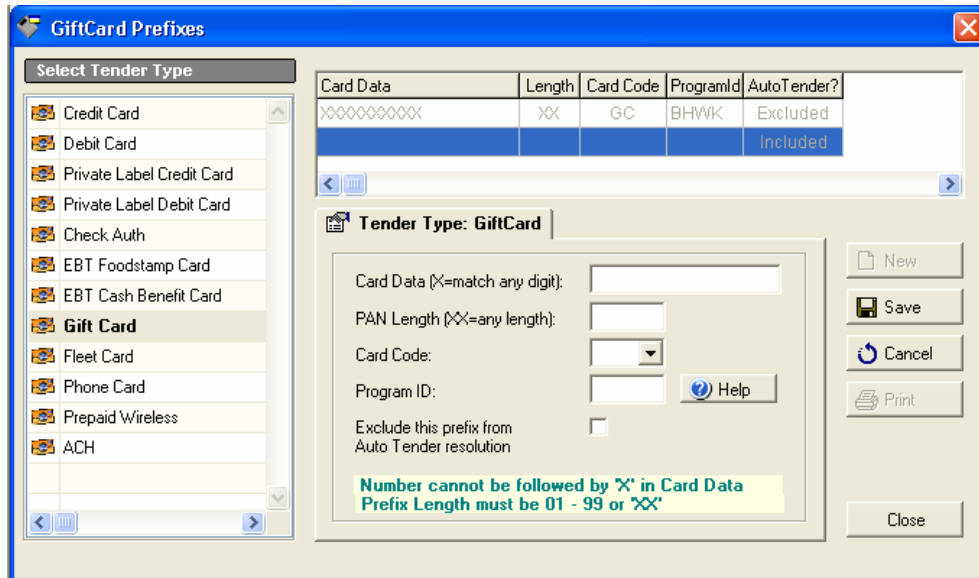
1. In WinEPS go to Configuration | Allowable Card Prefixes



2. On the left hand side, select Gift Card. This will display the current Gift Card Prefixes.



3. If this is a new installation no prefixes will be listed; if invalid prefixes are listed, be sure to remove them before proceeding.
4. Now you must add all the prefixes for your Blackhawk cards. First you must determine if your prefixes will have leading zeros. If you are using One Pass activation, you must use leading zeros. Gather your list of prefixes from the cards you are going to be using. If your location must support both Blackhawk and non-Blackhawk gift cards, the non-Blackhawk gift card prefixes must also be entered into the table.
5. Click the New button.



6. Fill in the Card Data with the first Blackhawk prefix. If you are using One Pass activation, include the leading zeros that are part of the prefix. If you are using Two Pass activation, do not include the leading zeros.
7. Set the PAN length to XX.
8. Set the Card Code to GC.
9. Set the Program ID as specified by your Gift Card host. You can click the Help button next to Program ID to determine if your host requires a specific setting. The default setting for Blackhawk cards is BHWK. Setting the Program ID will prevent the gift card prefix from allowing any redemptions, so be sure to only set program ID for prefixes associated with Blackhawk cards (leave program ID blank for non-Blackhawk GC prefixes).
10. Check the box next to 'Exclude this prefix from Auto Tender Resolution'. When saved, the 'AutoTender?' column should read 'Excluded' for all Blackhawk prefixes.
11. Click Save to save the entered prefix. If additional prefixes must be entered, click Add to continue adding prefixes. Remember to add both Blackhawk and regular gift card prefixes (if used).
12. Click Close to exit.

WinEPS Fixed Issues and Enhancements #4:

Verifone MX830/850/870

The MX series of terminals uses Form Agent Code to drive the terminal; this code fulfills the same function that SCAT code does in other terminals.

The Form Agent code and the Screen Files are packaged together in the same zip file for each terminal; the Form Agent code is not currently included in the WinEPS installation like the SCAT is for other terminals, so this necessitates copying the code from the CD when loading a brand new terminal as described in the instructions below.

Loading FormAgent Code on the MX830/850/870

Standard Loading

This section details loading FormAgent and Screen Files onto a terminal that does not already have FormAgent code loaded onto it. Terminals with FormAgent code and Screen Files already loaded will be upgraded automatically.

To load FormAgent onto the terminal you must complete the following:

1. Setup Terminal Configuration
2. Extract the FormAgent Code and Screen Files
3. Set Terminal to Download Mode
4. Run a Command Line Batch File to Load Form Agent
5. Set Terminal to Download Again
6. Run a Command Line Batch File to Load Screen Files

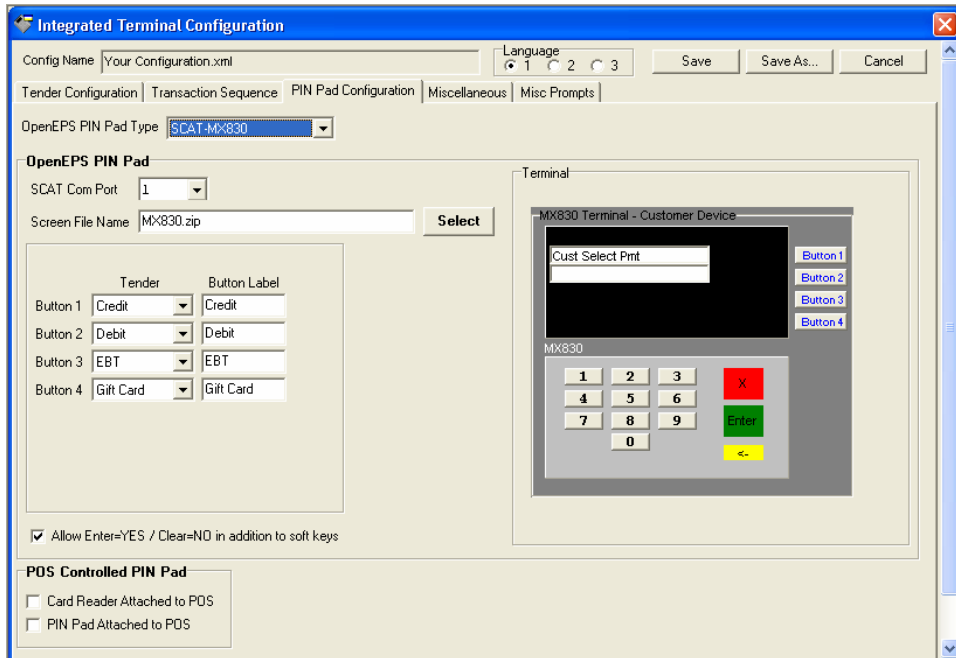
Setup Terminal Configuration

The MX830/850/870 is only supported for OpenEPS Lanes.

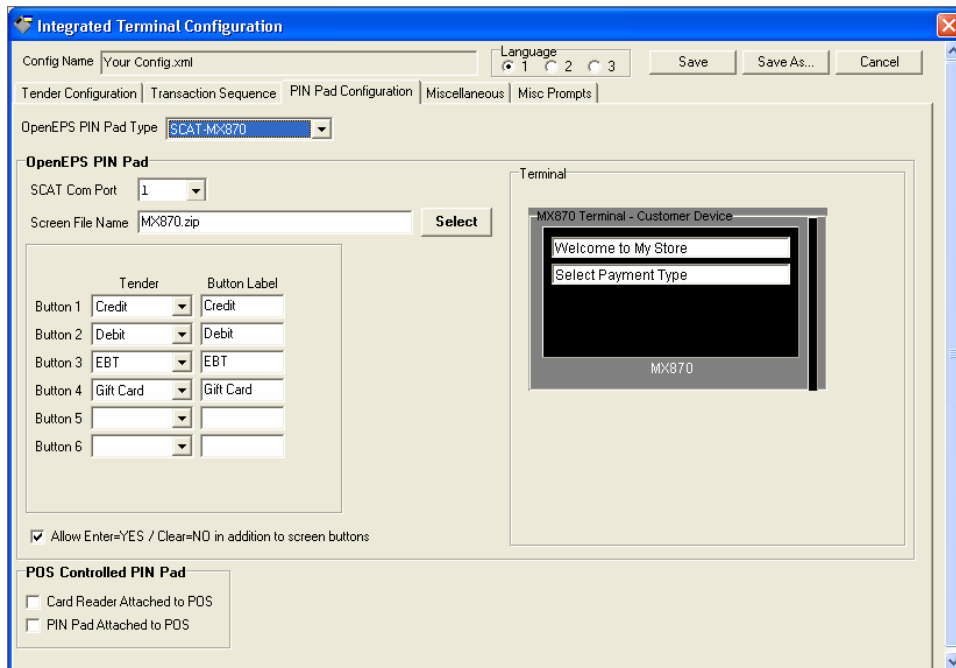
OpenEPS Setup for the MX830/850/870

To setup the Terminal, follow these steps:

1. In the WinEPS GUI, go to Configuration | Terminal Configuration | OpenEPS Lanes.
2. Use the OpenEPS PIN Pad Type drop down box to select the terminal type depending on the terminal to be used:
 - MX830 → SCAT–MX830
 - MX850 → SCAT–MX850
 - MX870 → SCAT–MX870
3. A graphic of the terminal and further settings will be made available.
4. In the SCAT Com Port dropdown box, select the COM port on the POS computer that the terminal attaches to.



Pin Pad Configuration – MX830/850



Pin Pad Configuration – MX870

5. The screen file will be automatically selected based on the terminal chosen. To set the Screen File Name manually, click the Select button. Select the appropriate screen file for the terminal you are using from the list provided.
 - If the appropriate zip file is not present follow these steps:
 1. Insert the WinEPS Installation CD
 2. Browse to the directory based on the terminal you selected, using Explorer:
 - MX830 → [CD Root]\OpenEPS\SCAT Code\MX830\Screen Files - default
 - MX850 → [CD Root]\OpenEPS\SCAT Code\MX850\Screen Files - default

- MX870 → [CD Root]\OpenEPS\SCAT Code\MX870\Screen Files - default
3. Locate the screen file zip and copy it to the [root drive]:\Program Files\MicroTrax\EPS\config\screenfiles\ directory, on the server which is running WinEPS.
 4. Now that the screen file zip is present on the server, you should be able to select it using the Select button next to the Screen File Name box.
6. Set up the Tender Buttons. For the 830 and 850, use the drop down buttons to configure the soft key Buttons 1 to 4. For the 870 the drop down boxes are used to configure the buttons that will appear on the terminal screen. Verify the default text for the Button Label is appropriate.

Extract the FormAgent Code and Screen files

1. Insert the WinEPS Installation CD.
2. Browse to the directory for the terminal:
 - 830 → [CD Root] OpenEPS\SCAT Code\Mx830\Screen Files - default
 - 850 → [CD Root] OpenEPS\SCAT Code\Mx850\Screen Files - default
 - 870 → [CD Root] OpenEPS\SCAT Code\Mx870\Screen Files - default
3. In the directory there will be a zip file called Mx830.zip, Mx850.zip, or mx870.zip depending on the terminal. Extract the zip file to a convenient location on your local machine (the machine to which the terminal is attached). Whenever instructed to copy files or run commands, the machine to which the terminal is attached should be used.

The following files will be extracted:

ddl.exe
fa.?????.tgz → This file name will reflect the current code load version
fmagent.p1
fmagent.p2
fmagent.p3
fmagent.sys
ldl
ldmx870fa.bat
ldmx870fa.sh
ldmx870sf.bat
ldmx870sf.sh
MX???Default.tgz → ??? will be 830, 850, or 870 as appropriate
packinglist

4. Rename FMAGENT.P1, FMAGENT.P2 or FMAGENT.P3 to FMAGENT.SYS depending on which dongle port the MX830/850/870 Cable is plugged into (P1 = Port 1, P2 = Port 2 and P3 = Port 3); FMAGENT.SYS is defaulted to port 3, as that is the most common and it indicates the cable runs 'strait through' the dongle.

Set Terminal to Download Mode

1. Connect the terminal to the machine from which you plan to load it. This could be the WinEPS server or the POS lane, wherever the extracted Form Agent and Screen files reside.
2. Reset the terminal: On the top edge of the terminal in the right corner there is a small hole. This hole is the reset button; use a pin or paperclip to press this reset button. Hold the

button down until the blue "run-way" or MSR active indicator lights turn on, then release the button.

3. Once the reset occurs you will be prompted for the password. Key in: 1-6-6-8-3-1 and press Enter.
4. From the Verifone System screen, select File Transfer
5. Next, select the Download icon.
6. From the Configure Direct Download screen, verify the following settings:
 - Port: This is the port on the dongle to which the terminal is attached, and not the Com port on the computer. This number should match the FMAGENT.SYS which you renamed in the [Extract the FormAgent Code and Screen Files](#) section above.
 - Baud: Set to 115200
 - Download Type: For a complete load of FormAgent Code set to Full. For loading just the screenfiles, select Partial.
7. Press the key labeled "Go". The terminal is now ready to receive the download.

Run a Command Line Batch File to Load Form Agent

1. Open up a command prompt.
2. Change directory to the location where you have copied the files.
3. At the command Prompt type in the following prompt:
LDMx870FA 1 fa.?????.tgz

Where '1' is the com port that the terminal is connected to and the ???? in the fa.?????.tgz file name reflects the current code version.

Note that the batch file name (LDMx**870**FA.bat) is the same, regardless of which terminal you are loading.

4. Press enter to run the command line and the terminal should begin loading the FormAgent code.

Set Terminal to Download Again

After the Form Agent code loads, the terminal will have to be placed back in download mode to load the Screen Files.

Refer to the Set Terminal to Download section above for instructions. Select Partial Load instead of Full Load to load Screen Files.

Run a Command Line Batch File to Load Screen Files

1. Open up a command prompt.
2. Change directory to the location where you have copied the files.
3. At the command Prompt type in one of the following prompts, depending on terminal:
 - LDMx870SF 1 mx830Default.tgz
 - LDMx870SF 1 mx850Default.tgz
 - LDMx870SF 1 mx870Default.tgz

Where '1' is the com port that the terminal is connected to and MX[830/850/870]Default.tgz is the name of the screen files you wish to load.

Note that the batch file name (LDMx870SF.bat) is the same in all three instances, regardless of terminal used.

4. Press enter to run the command line and the terminal should begin loading the Screen Files.
5. Once the Screen Files finish loading, it will likely be necessary to reset/reboot the terminal to make it ready for use.

Manual Loading

Only manual initial loading is supported for the MX series; refer to the [Standard Loading](#) section above.

Virtual Terminal 2 Fixed Issues and Enhancements #1:

VT Command Line Parameters

VT2 supports the following command line parameters:

Parameter Description	Syntax	Example
Load specific configuration file	C	C:vt2setup.xml
Data File Path Path to the VT2.Zip file {Data file path (only), does not include file name}	D	D: "C:\Program Files\MicroTrax\OpenEPS\ Trailing \ is mandatory
QA mode (no parameter required)	QA	QA
Start VT in configuration editing mode	CONFIG	CONFIG
Set Store Number (up to 8 digits) {If a store number is used the OpenEPS lane JRNL file name will include the Store Number as well as lane number}	STORE	STORE:12345678
Set Lane Number (up to 4 digits) Only supports lanes 1 to 99	LANE	LANE:0012
Set User ID (up to 50 characters, no spaces)	USER	USER:YourNameHere
Signon with Cashier and Lane (retained for backward compatibility)	S	S:12,12
No Splash Screen Do not display the splash screen at startup (no parameter required)	NS	NS

If VT2 receives a set of parameters in the command line where some or all are incorrect, it will ignore all the parameters that are incorrect and will proceed to operate using the correct ones only.

Command line parameters may be designated with either the colon or the equal sign.

Example command lines:

```
vt.exe store:123 user:YourName lane:5
vt.exe store=123 user=YourName lane=5
```

Command line parameters may not have spaces in the values. In the example above, if *YourName* had a space in it (*Your Name*) then the command line would be invalid.

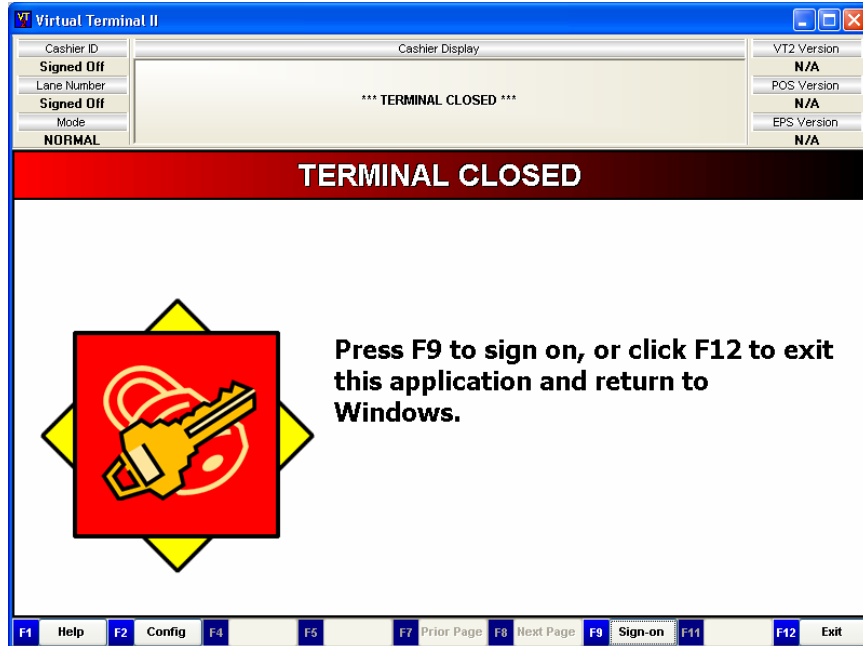
Virtual Terminal 2 Fixed Issues and Enhancements #2:

Using the MagTEK MINI check reader with VT

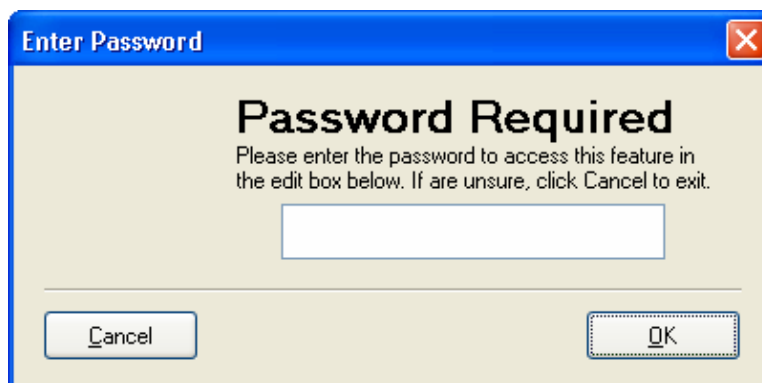
Virtual Terminal 2 can use the MagTEK MINI check reader to acquire check MICR information.

Follow the steps below to configure VT to accept RawMICR information from the MagTEK MINI check reader

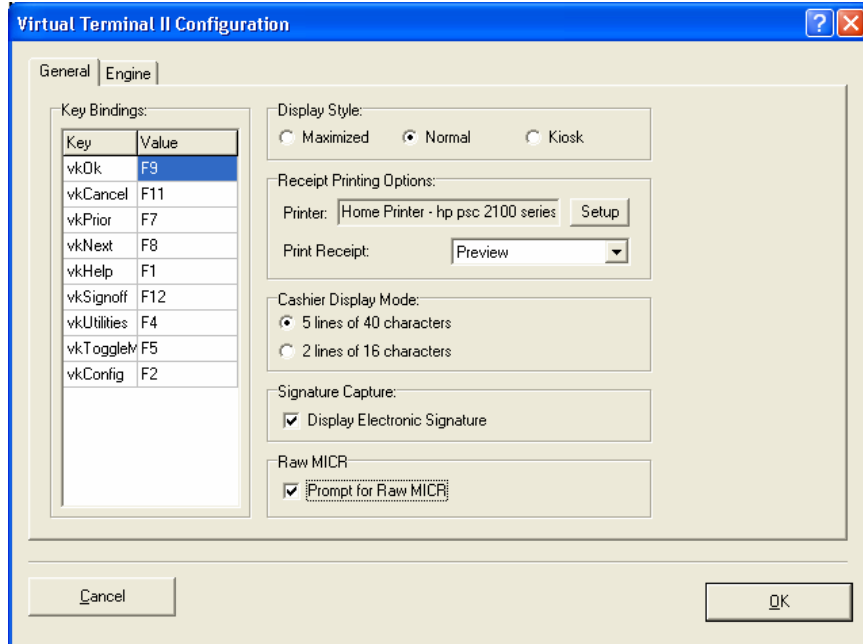
1. Start VT.



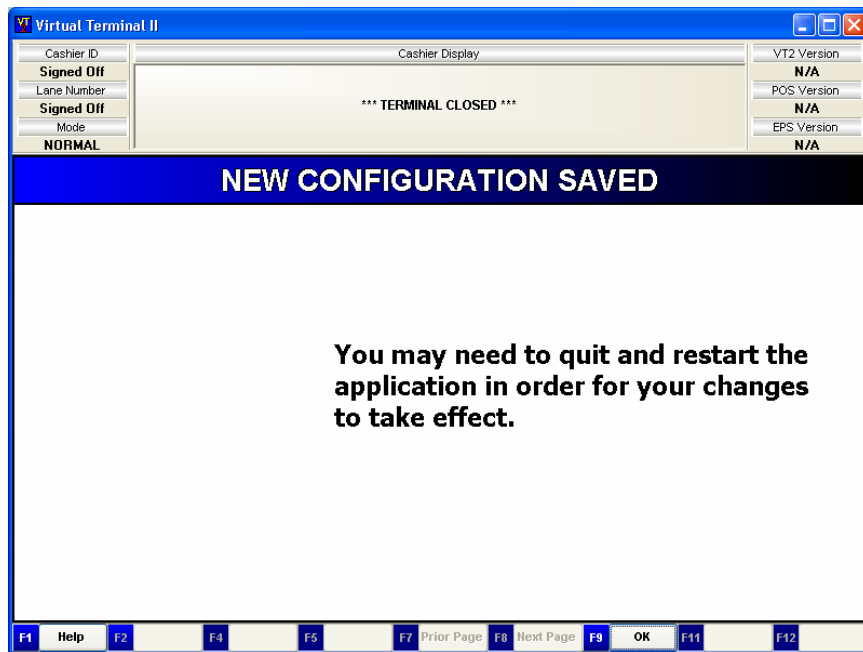
2. Click the Config button.



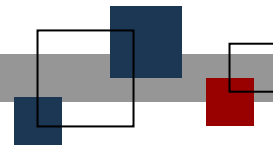
3. Enter the configuration password. If you need assistance acquiring the configuration password, contact MTX Support.



4. Select the Prompt for Raw MICR option at the bottom of the configuration screen.
5. Press the Ok button to save your settings.



6. Exit VT by pressing Ok and then Exit, or by selecting the red X in the upper right corner.



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