

WinEPS Release Notes

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Section 1

823.0 SP2 Information

This section covers changes, bug fixes, and enhancements to the 823.0 SP2 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 823.0 SP2 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	823.0.0.622
EPSTMenu.Exe	823.0.2.439
Rpt.Exe	823.0.0.52

OpenEPS Versions:

Module	Version	Date
mtx_eps.dll	823.0.0.759	11/20/2007
mtx_pos.dll	823.0.0.14	7/9/2007
libmtx_eps.so	823.0.0.143	10/15/2007
libmtx_pos.so	823.0.0.14	7/9/2007

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	41	3/20/2007
	HYP 4100	232	1/25/2007
	HYP L4250	232	1/25/2007
	ICE 5500	117	8/8/2007
	ICE 6000	117	8/8/2007
	Mx830/850/870	210U	6/29/2007
	NCR 5993	13	2/8/2007
	Omni 490	61	3/20/2007
	Omni 7000	46	7/2/2006
	VX670	14	11/14/2007

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	8	7/18/2007

Known Issues

McAfee Virus Scanner, Version 4.5.1 Issues

In field and lab testing, the McAfee Virus Scanner software Version 4.5.1. has shown critical issues with how it interacts with the WinEPS software suite. This particular version of the scanning software holds files associated with the WinEPS software, denying file access.

More recent version of the McAfee software has not exhibited the same issues, so it is recommended that more recent versions of the McAfee software be used and the 4.5.1 version be avoided.

As a note, it is important that no software lock file access to the OpenEPS directory on the POS lane or the WinEPS directory on the PC Server in such a way as to deny access to the files by the WinEPS software itself. The WinEPS software suite depends on reading and writing to its own files for functionality.

Upgrade requires new Concord H&C response code for Checks

WinEPS users that are sending payments to Concord H&C who are upgrading to 823 SP1 will need to modify their host response codes for checks.

Customers installing 823 SP1 for the first time will not need to make these host response changes as they are included in the default installation package.

Upgrading customers will need to add the following two check related response codes.

Upgrading customers should add a CK specific entry for the A00 response code, and should update the A03 code to the new text below:

Response code: A00

Card Code: CK

Terminal Action: AA

Cashier Display (1x16): ~a Apr Keep Ck

Cashier Display (5x40): ~a Approved Keep Check

Customer Display: Approved

Response Code	A00	Cashier Display (5x40)	~a Approved Keep Check	Customer Display	Approved
Description	Approved check, no ECC				
Card Code	CK - Check Auth				
Terminal Action	AA - Approved Online	Cashier Display (1x16)	~a Apr Keep Ck		
				Save	Delete
				Cancel	

Response code: A03

Card Code: CK

Terminal Action: AA

Cashier Display (1x16): ~a APPRVD ECC

Cashier Display (5x40): ~a APPROVED FOR ECC
Insert check to print void and
return check to customer

Customer Display: Approved

Response Code	A03	Cashier Display (5x40)	Customer Display
Description	Check Approval, ECC Conversion	APPROVED FOR ECA, ~a MARK VOID AND RETURN Insert check to print void and return check to customer	Approved
Card Code	CK - Check Auth		
Terminal Action	AC - Approved For E.C.C.	Cashier Display (1x16)	
		~a APPRVD ECC	
		Save	Delete Cancel

WinEPS 823 Upgrade Requires Minimum of WinEPS 815.3

Users who are upgrading a previous version of WinEPS to 823 must be on a minimum WinEPS version of 815.3 prior to starting the 823 upgrade.

If a system prior to 815.3 requires upgrade, it should be upgraded to at least 815.3 first. This can be accomplished by using any WinEPS CD of version 815.3 through 821.0 to upgrade the older system.

WinEPS versions prior to 809.3 require special handling; if your WinEPS version is older than 809.3, contact MTXEPS Support for upgrade instructions. With the inclusion of the many new options since 809.3, users of versions prior to 809.3 are encouraged to backup their original WinEPS installation and to perform a fresh installation of the latest WinEPS and configure it from scratch instead of upgrading.

The required minimum version has no impact on new installations; fresh installations work correctly.

Concord H&C Check Auth Number no longer hard coded to display

The 1x16 display for check transactions to the Concord H&C host was previously hard coded to show the approval number returned by the host. To allow for ECC specific messaging and user customization, the hard coding has been removed, and the message displayed will be taken from the configured text.

It is still possible to display the approval number if desired by changing the line text to read:
APPRV# ~a

485 Stand Beside Cashier Totals

The option to clear cashier totals at sign off is no longer available. Cashier totals will now only be cleared at the End of Day when all totals are normally reset.

IBM use of OMNI 7000 requires the latest SCAT code

IBM now supports the use of the Omni 7000 terminal. To support the Omni 7000 on the IBM system, the latest SCAT code, version 45 or higher, must be loaded onto the terminal prior to use with the IBM system.

This means that each terminal must be loaded from a Windows computer using the manual loading instructions for the 7000 that are listed in the WinEPS User's Guide. Once loaded and attached to the IBM, further SCAT upgrades will be automated.

WinEPS Fixed Issues and Enhancements

Enhancement	Description
1. Store Monitoring Service: Status Message	- Enhancement - WinEPS regularly writes its status to the WinEPSStatus.xml file. The default is every 10 minutes. - OpenEPS can be configured to send an informational message to WinEPS on a regular basis detailing the lane's current status. - Information in the status message includes: - Hard Drive space remaining - Operating System name - Offline Transaction count & value - Reported PIN Pad attached - PIN Pad code version - PIN Pad model number, serial number & OS (Future Development) - Config file in use - Biometrics connection status - Status data can be viewed in WinEPS by going to the Inquiry Status menu. Full details on this feature are included in Section 2.
2. GUI allowed 'blank' Card Code in Allowable Card Prefixes	- Fixed - A previous configuration bug allowed the user to enter a blank card code when adding a new card prefix to the table. All card prefixes require an associated card code to process successfully.
3. Web Server	- Enhancement - WinEPS has a new Web Server option to support web-based POS lanes. - WinEPS opens a Web Server port that allows web client connections using HTTPS / SSL. - The web service is enabled automatically when lanes are started and at least one Web Service lane is defined. Similarly, it is disabled when no Web lanes are defined. - MTX does not supply a web client interface as this time. For information on the web client specification requirements and developing to the WinEPS Web Server, contact the MTXEPS Support or Sales Team. Full details on this feature are included in Section 2.
4. Update WinEPS configuration files to XML	- Enhancement - Previously many of the configuration files for WinEPS were in paradox database format. These files have been updated to XML for improved flexibility. - Both WinEPS and OpenEPS have been updated to utilize the new file format.

Enhancement	Description
5. FSA Card Support - OpenEPS	- Enhancement - WinEPS now supports the use of Flexible Spending Account (FSA) cards. - FSA Cards will be treated as credit cards, and will be differentiated from standard credit cards based on an FSA Prefix Table, similar to the way the Debit BIN prefix table identifies valid Debit Cards. - FSA support includes the use of two new TACs and the associated bits: TAC 'N' - FSA Amount (Bit 102) TAC 'V' - Rx Amount (Bit 103) - OpenEPS includes several new functions that allow the POS to set the FSA and Prescription amounts and to determine if the customer payment card used is an FSA card. - The following new functions have been added to OpenEPS: MTX_POS_SET_FsaAmount (Bit 102) MTX_POS_SET_RxAmount (Bit 103) MTX_POS_GET_IsCardFSA - FSA transactions will only function for POS systems and hosts that specifically support the FSA amounts and function calls. - The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing: ACI Concord EPC Concord H&C Demo LX Epic Tranz - WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. Full details on this feature are included in Section 2.
6. Disable 'PIN Required' setting in Card Profiles	- Removed - The checkbox on the Card Processing profiles screen for 'PIN Required' was superfluous; the requirement for PIN is handled by the PIN TAC in the transaction sequence. - The Card Processing Profile 'PIN Required' option has been disabled.
7. Remove unused files	- Enhancement - During upgrade from older versions, some extra files were left over that the current version of WinEPS no longer uses. Excess files that are not in use are now deleted during the upgrade.

Enhancement	Description
8. WinEPS IP Address setting improperly saved on cancel	- Fixed - In the terminal configuration, the WinEPS IP address was saved whenever changes were made; even if the user clicked cancel instead of save. This has been corrected to save the IP information only if the Save button is selected.
9. Add operator activity to the event viewer	- Enhancement - A new option has been added that will write all User Activity Log messages to the windows Application Event Log in addition to the WinEPS main log file. - The new option "Write User Activity to Event Log" is available on the System Operation tab of the Processing Options screen
10. Canceling Zip code causes no signature prompting	- Fixed - Corrected an issue where customer canceling during the Zip Code TAC would cause the O – Signature Capture TAC not to be processed.
11. Change phone number entry prompt for BioMetrics	- Enhancement - The original display for entering Phone Number on the SCAT terminal for Biometrics included a parenthetical section for the area code: () ____-____ - Since this confused customers who did not need to enter the area code, the display has been altered to only show the area code parentheses when the phone number entered is longer than 7 digits.
12. WinEPS upgrades require minimum version of 815.3	- Modification - To clear up older files and reduce the size of the installation package, the minimum starting version for an upgrade is now 815.3 instead of 809.3. - See the Known Issues Section for additional information.
13. Correct TOR Reporting	- Fixed - Modifications to the way TORs were handled resulted in incorrect TOR reporting on the WinEPS reports. The reports have been updated to correctly display the TORs.
14. Remove basic merchant agreement text in favor of ECC text	- Enhancement - For ECC transactions (AC response only), the following text has been removed from the receipt to make room for the configurable ECC disclaimer text: I AGREE TO PAY ABOVE TOTAL AMOUNT ACCORDING TO CARD ISSUER AGREEMENT MERCHANT AGREEMENT IF CREDIT VOUCHER - This text will appear normally on any non-ECC transaction.

Enhancement	Description
15. Stop/Start through WinEPS GUI gets error if no rights	- Fixed - If a Windows user without the stop/start service rights attempts to stop or start the WinEPS service through the GUI, an error message will be displayed. - Previously no error was shown, and the service would simply fail to stop or start.
16. Biometrics support for Linux POS lanes	- Enhancement - The OpenEPS biometrics interface now works for Fedora version 2.4.20 Linux-based POS lanes. - Biometrics does not work with other versions of Linux, including other versions of Red Hat.
17. Declined Offline Gift Activations with Card Expired	- Fixed - There was an error during offline processing where gift card activations were being declined as expired cards even though the option for 'expiration date required' in the card processing profiles was not turned on. This issue has been corrected.
18. ECC Agreement Not Being Set on AC Response From ServerEPS	- Fixed - The Electronic Check Conversion agreement text is now set correctly when OpenEPS connects directly to ServerEPS.
19. Enhance MTX_POS_SET_LanguageID	- Enhancement - OpenEPS has been enhanced to retain the value provided by the POS in the MTX_POS_SET_LanguageID call from BeginOrder to EndOrder. - This change will prevent a reset in the middle of a transaction from requiring the POS re-set the LanguageID value.
20. WIC not sending correct RX for date requested	- Fixed - Corrected an issue with WIC where if the POS passed a request for a prescription that was not for the current period, OpenEPS would send the incorrect prescription back to the POS.
21. Corrected formatting of Approved Transaction report	- Fixed - The approved transaction report has been formatted so that each transaction is displayed on only one report line.
22. Cancel key not clearing wallet	- Fixed - If the clear/cancel key is hit at the customer greeting screen, the wallet information was not being cleared properly from the OpenEPS buffers.

Enhancement	Description
23. Add New Range for EBT	- Enhancement - Added a new card Prefix for EBT Cards issued by Wyoming: Added Prefix: 505349 Card Length: 16
24. Remove signature line from offline DB & EBT	- Enhanced - The signature line has been removed from Offline Debit and Offline EBT receipts as it is no longer required by Reg E.
25. File/Print loses unsaved changes for open edit pane	- Fixed - Using the option to print a list of lanes while in the process of editing them caused any changes made to be lost. This has been corrected so that an error message is displayed to the user.
26. Write report block information at the end of day	- Enhancement - Report block information is now confirmed to be present in the actlog during the end of day process. If the report block information is absent this information is written to the actlog during the end of day process prior to archiving.
27. Remove password change button from group operator	- Fixed - When logged into WinEPS using the a Windows Group Operator account, the Change Password button was still available even though password changes to these accounts do not occur in WinEPS. This button has now been correctly disabled.
28. Support Multiple Card Processing Profiles	- Enhancement - WinEPS supports the use of multiple Card Processing Profiles. - Similar to the way that WinEPS allows the definition of and use of Lane Configurations, each lane is now defined with a specific Card Processing Profile XML file. - This method allows the flexibility to make changes to a Card Profile for individual or groups of lanes while other lanes use a separate configuration file. - This setup is optional, and by default, all lanes use a single Card Processing Profile. - For additional information on Card Processing Profiles, refer to the WinEPS User's Guide, Chapter 8, Card Processing Profile section.
29. Update MultiEPS Installation	- Enhancement - The MultiEPS installation has been updated with the latest OpenEPS DLL files from 823 SP1. Additionally, the keywords PrintStoreCopy and StubTimeout have been added to the MultiEPS.Ini file on an upgrade.

Enhancement	Description
30. Remove Unused IBM FTP Info	- Enhancement - The WinEPS Menu removes the IBMFtpInfo.xml file from the EPS directory if there is no primary or backup IP address defined for the IBM connection info. This will eliminate the file and prevent the IBM thread from starting if the IBM integration is not in use.
31. Do not start IBM thread if not IBM	- Fixed - The latest WinEPS engine corrects an issue where the IBM FTP thread would start even if no IBM lanes were defined. Starting the IBM thread caused issues during an EOD. - The IBM thread will no longer start unless an IBM lane is defined.
32. Correction for FSA Stand in	- Fixed - FSA offline Stand in has been updated so that, if WinEPS is configured for offline processing, only the FSA portions of the transaction will be approved.
33. Disallow Discover cash only	- Fixed - Discover card Cash-only transactions have been updated to be declined by WinEPS. - If WinEPS receives a Discover Cash back only transaction, it will be declined with a 146 because this is not a valid transaction for grocery stores

OpenEPS Changes

Enhancement	Description
1. Access Violation in OpenEPS	- Fixed - An issue where a change in configurations could cause an access violation to occur was corrected.
2. Setting check type prevents moving off triple language prompt	- Fixed - On some systems, when the Triple Language TAC was in use, the POS would be required to wait until after the customer selected a language before the POS could continue with the transaction. - This has been fixed so that when a POS system sets both the payment type and transaction type, OpenEPS will bypass the language selection prompt if it has not already been set.
3. Pre-Processing failed to load configuration file	- Fixed - During Pre-Processing of offline transactions, OpenEPS could encounter an access violation because the XML configuration was not loaded. OpenEPS has been updated to load the XML configurations prior to performing any Pre-Processing.
4. Creating Spool File in OpenEPS Folder	- Fixed - OpenEPS and Virtual Terminal have components in common with the WinEPS engine; in the past, activating these components would cause OpenEPS or VT to create the Spool01.eft file in the same way that the WinEPS engine does. - This has been corrected by cleaning up the program definitions within the components such that only the WinEPS service will create the Spool file.
5. No Credit to Debit for RFID	- Enhancement - Credit to debit conversion will no longer be attempted for cards scanned via RFID.
6. Offline Stand in Checks missing signature on forward	- Fixed - During Stand In at the Post processing of Check transactions with signature capture, the signature data was not included when the transactions were forwarded up to WinEPS. This has been corrected so that signatures are now properly included.

Enhancement	Description
7. Gift Card Balance inquiry after Transaction Type is set	• Enhancement • A new keyword has been added to the OpenEPS.INI file: BIAFTERPOS • The keyword stands for: Balance Inquiry after POS sets Transaction Type • If this option is set to 'Y' the \$ - Purch/Bal Inq TAC will be processed even after the POS sets a transaction type. This means that the POS could set 'Purchase' but the customer could then select Balance Inquiry instead. • When set to 'N' (or if this keyword is absent), the \$ - Purch/Bal Inq TAC will not be processed after the POS sets the tender type. • If this keyword is not in the file, the value defaults to 'N'.
8. Lane Timer Issue	• Fixed • When new timeout values were entered on the host screen, and implemented through a stop and restart of the WinEPS engine, it still required the POS application be stopped and restarted as well. • OpenEPS has been updated to load the new values immediately when it downloads the changed configuration from WinEPS.
9. Do not process j TAC if POS sets Cashback	• Enhancement • The j – Cashback Customer TAC will no longer process if the POS has set a specific cashback amount. • OpenEPS will not move off the Cashback Customer TAC if it is already processing it when the POS sets the cashback amount.
10. Corrected WIC issues	• Fixed • The latest OpenEPS DLL files resolve the following WIC issues: • First, the WIC card was being incorrectly locked when the POS called LockWICICC but the date passed was past the auth date on the card. The WIC card is no longer locked in this situation. • Secondly, the wrong error codes were being returned in some cases where the RX start and end dates were either matching or the start date was later than the end date. The proper error codes are now returned. • Lastly, there was an issue where the POS prompts were being picked up before OpenEPS set them. The prompts are now before set before the POS is allowed to pick them up. • This update also resolves an issue found with the VX670 where when the engine was shut down while not doing stand in, the PIN pad would not recover from the "EPS Processing Down" prompt.

Enhancement	Description
11. Verify current TAC sequence for linux	- Enhancement - Added verification of the current TAC sequence. If the current TAC being processed is not in the current sequence, that TAC will be skipped. This change was made to address issues where the \$ - Purch/Bal Inq TAC is prompted for when it is not in the current transaction type, such as activation.
12. Invalid Track 2 causes reswipe	- Fixed - OpenEPS has been updated to correct an issue with invalid Track 2 card reads that were causing the transaction to go manual. If a card is found to have invalid or bad Track 2 the terminal will now prompt to reswipe the card in question, after 3 bad card slides the normal rules will then be followed.
13. Synchronizing terminal status	- Fixed - OpenEPS will now set dataentry_status to 6 when the a new connection is received from the PIN pad and will also mark SCAT alive when a new connection is received; this will prevent OpenEPS from getting out of sync with the POS.
14. Not set Ready until all loading is completed	- Fixed - In a slower processing environment (such as IBM), the OpenEPS call of ScatReady=<Done> can be made before the terminal startup processing is complete. This would allow the POS to begin setting transaction data that could be cleared when the configuration process has completed its load. - OpenEPS will set ScatReady to <Wait> until the configuration is done and will then reset the call to <Done>, allowing the POS to continue normal processing.
15. FSA TACs present but no FSA BIN	- Fixed - An issue has been corrected where if the FSA TACs were in the payment sequence but no FSA Bin table existed on the POS lane, OpenEPS would mistakenly set FSA amount fields as needed data.

OpenIP Changes

Enhancement	Description
1. -No Change to OpenIP -	---

Host Changes

ACI

Enhancement	Description
1. ACI Host module updated for multiple BIN types	- Enhancement - The ACI host module has been updated to handle three different Debit BIN file formats: ACI, MPS1 and MPS2. - The module will attempt to convert the BIN file first using the ACI format, then MPS1, and finally MPS2. If the BIN file is not in one of these three formats, no conversion will occur and an error will be logged.
2. Convert credit to debit back to credit for local approval	- Enhancement - For credit to debit transactions that receive a host response of 91 indicating 'attempt to take locally', or the timer expires while waiting for a host response, the transaction will be converted back to credit for offline processing, if offline debit is not allowed.
3. Remove Gift Card totals from settlement message	- Fixed - Corrected the settlement values for the ACI host to reflect the ACI specification. Gift Card and Check Auth totals were incorrectly included in the settlement total, as the ACI Spec does not list their inclusion.
4. Remove limit of 5 tries to submit TOR	- Enhancement - The number of times to re-try a TOR has been increased from 5 to 120 times within a business day. All TORs are removed at End of Day, as normal.
5. FSA Card Support	- Enhancement - WinEPS now supports the use of Flexible Spending Account (FSA) cards. - FSA transactions will only function for POS systems and hosts that specifically support the FSA amounts and function calls. - The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing: - ACI - Concord EPC - Concord H&C - LX - Epic Tranz - WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. Full details on this feature are included in Section 2.

Enhancement	Description
6. GC Approvals for \$0 processed as decline	- Enhancement - Fixed issue for ACI where a Gift Card Purchase request was sent back approved for \$0.00. Approvals for \$0.00 will now be processed as declines by WinEPS. Previously WinEPS was sending back an approval for the full amount; WinEPS has been enhanced to send a special hard coded 9Z decline instead.
7. ACI Host communication issue	- Fixed - Variable message formats are available to the ACI host and WinEPS was not correctly using all of them during the initial handshake. This would cause the ACI host to fail to start and connect.
8. Send POST Transaction #	- Enhancement - The new ACI host module sends the POS Post Transaction Number in bit 3-15 Token 74, if it is set by the POS.
9. Fixed Unsupported Voids response	- Fixed - Unsupported Void by Seq # transactions were receiving an incorrect response. The response has been updated to return the correct MTX-146 Invalid Transaction code.
10. Send RFIS Indicator	- Enhancement - RFID indicator is now sent to the ACI switch. This indicator lets ACI know if a transaction was processed by RFID card.

Albertsons

Enhancement	Description
1. Removed unneeded data	- Fixed - Removed unnecessary data from the message sent to the Albertsons host.
2. Removed unsupported bit 62	- Fixed - Addressed an issue where WinEPS was setting bit 62 in the message out to the host, but the Albertsons host does not support. Bit 62, - Bit 62 is no longer set when formatting message to the Albertsons host.

Ascendent

Enhancement	Description
1. -No Change to Host -	---

BioPay

Enhancement	Description
1. -No Change to Host -	---

Chase

Enhancement	Description
1. -No Change to Host -	---

Concord: EPC

Enhancement	Description
1. New balance field	- Enhancement - Concord has introduced a new field for returning the balance of Gift Cards. - WinEPS has been updated to take advantage of this new field and is now drawing the balance amounts from it instead of the display data field the balance was previously returned in.

Enhancement	Description
2. FSA Card Support	• Enhancement • WinEPS now supports the use of Flexible Spending Account (FSA) cards. • FSA transactions will only function for POS systems and hosts that specifically support the FSA amounts and function calls. • The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing: - ACI - Concord EPC - Concord H&C - LX - Epic Tranz • WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. • Full details on this feature are included in Section 2.

Concord: H&C Format

Enhancement	Description
1. Remove hardcoded 1x16 cashier prompts	- Enhancement - Previously, the 1x16 display for check transactions was hard coded to disregard the configured text and to instead display the approval number. The hard coding has been removed and the display will now show the text that is configured. - It is still possible to display the approval number if desired by changing the line text to read: APPRV# ~a - This is listed in the Known Issues section
2. Limit Extended MICR Data field to 65 chars	- Fixed - Previously, the MICR Data field "o" was filled with all the data that OpenEPS received for it; this was incorrect and has been limited to 65 characters only.
3. Automatic approval of check type 'Other'	- Enhancement - WinEPS will stand in for all checks with a type of 'Other' that are sent the to Concord H&C host. WinEPS will automatically approve these transactions, sending the local approval back to the lane. - WinEPS will not forward these checks to the host.
4. Full track 2 not sent on RFID read	- Fixed - WinEPS was not sending up the full track 2 data on credit cards when the card was read through an RFID read. Instead WinEPS was only sending the card information as if it was manually entered. - Updated code now sends the full track 2 data on credit RFID reads.
5. FSA Card Support	- Enhancement - WinEPS now supports the use of Flexible Spending Account (FSA) cards. - FSA transactions will only function for POS systems and hosts that specifically support the FSA amounts and function calls. - The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing: - ACI - Concord EPC - Concord H&C - LX - Epic Tranz - WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. Full details on this feature are included in Section 2.

Enhancement	Description
6. Host Response Code update	- Enhancement - The response code list for the Concord H&C host has been updated. - The following response codes have been added: - C11 – ETC velocity referral exceeds store's daily count - C12 – ETC velocity referral exceeds store's daily amount - C13 – ETC velocity referral exceeds stores daily both (count & amount) - C14 – ETC velocity referral exceeds store period count - C15 – ETC velocity referral exceeds store period amount - C16 – ETC velocity referral exceeds store period both (count & amount) - C21 – ETC velocity referral exceeds chain daily amount - C26 – ETC velocity referral exceeds period both (count & amount) - C30 – Daily amount exceeded - C31 – Daily merchandise amount exceeded - C32 – Daily cash amount exceeded - C33 – Weekly amount exceeded - C34 – Daily cash-only amount exceeded - C35 – Weekly cash-only amount exceeded - C36 – Weekly cash-only count exceeded - C37 – Too many card uses today - C38 – Too many card uses this month - C39 – Too many card uses this week - C40 – Cashback amount below minimum - C41 – Total transaction amount exceeded - C42 – Transaction accepted- Phone card activation declined - C43 – Transaction declined Phone card activation declined - D10 – Account not 10 days old WEX card not allowed - D14 – No sharing group match - D15 – Over limit. Exceeds benefits - D16 – Excessive activity Excessive driver pin tries - D17 – Negative file decline - D18 – General decline - D19 – Hold card, Stolen card, On negative file with pick up card - D20 – ETC decline- Merchant location not on file - D22 – CHK SEC/ETC- License on negative file, CHK security negative file - D24 – ETC NEG hit – NOTON – US, Multi Hits - D25 – CHK Security Neg File is Down - D27 – Invalid license compare to mask - D28 – Invalid MICR data - D29 – EBT – Amount too large - D34 – Duplicate completion received (Decline originates at the Atlanta host) - D35 – Reversal completion not allowed - D36 – Invalid authorization - D37 – Recharge amount exceeded - D38 – Recharge number exceeded - E01 – Input error-retry - E12 – No mail - E13 – Wrong block number - E2B – Error in routing or referral - E2D – Network or bank unavailable; try again - E2F – Host file loading

Enhancement	Description
7. Store and Forward, Automatic Resubmit	- Enhancement - For offline forward transactions of EBT Food and EBT Cash, if Concord returns a decline that is mapped to a WinEPS code of NB (indicating balance remaining on card), WinEPS can automatically resubmit the transaction for the remaining balance. - This functionality is only for transactions that were originally taken in offline stand-in mode. The new functionality allows the merchant to get a partial payment for an offline transaction when available instead of receiving no payment due to a decline. - The setting is configurable on the Concord host configuration screen.
8. WIC Check Support	- Enhancement - Not Yet Certified - WinEPS supports the use of WIC checks to the Concord H&C host. - WIC checks are received from the POS lane as a WIC check type but are processed to Concord H&C as a check type of Personal with a Program ID of 'WIC'.
9. Fid F blank on some TORs	- Fixed - TORs for approved transactions where OpenEPS lost connection to WinEPS included Fid F (approval number), but it was blank. This has been corrected so that the approval number received will be set in Fid F when the TOR is sent up to the host.
10. Void of EBT now includes Fid F	- Fixed - Voids of EBT Food and EBT Cash Purchase transactions were receiving the decline "E27RVSL DECLINE !" from the host. This was due to a missing optional data field FID F (Approval Number) in the outgoing message. This FID has been added to the Void message.
11. Fid 'i' limited to Credit	- Fixed - FID i was being sent for all tender types. To match what Concord is expecting, This FID will now only be sent on credit transactions.
12. FSA Fixes	- Fixed - The Concord H&C host module has been updated with a few FSA transaction fixes. - The latest host module has been certified for FSA.
13. FSA Void, FID i Issue	- Fixed - Corrected an issue when doing a FSA void we were setting FID 'i' incorrectly

Concord: Memphis

Enhancement	Description
1. -No Change to Host -	---

Demo

Enhancement	Description
1. -No Change to Host -	---

ePicTranz

Enhancement	Description
1. Updated ECC Receipt text	- Enhancement - To comply with new regulations and customer requirements, the default ECC text printed on the customer receipt has been updated. - The new default ECC text is: I authorize (merchant name) to convert my check to an EFT or paper draft, and to debit my acct for the amt of the trans. In the event that my EFT or draft is returned unpaid I agree that a fee of \$25.00 or the max allowed by law may be charged to my acct via draft or EFT. I am aware my acct may be debited as soon as today and my check will not be returned to me by my bank.
2. Enhance EpicTranz to Send PO#	- Enhancement - The EpicTranz host has been enhanced to send the Purchase Order field with any tender type when it is received. - Previously, PO Number was sent only for the Private Credit tender Type.

Enhancement	Description
3. Enhance Epic Tranz	- Enhancement - The Epic Tranz specification has been updated to support several new fields for use with ServerEPS. - The following fields have been added: - Customer Name - Customer Street Address - Customer City - Customer State - Currency Code - Added Call Center, Recurring Charge and Internet Sales to the valid Condition Codes. - Added codes indicating Mail Order and E-Commerce transactions
4. FSA Card Support	- Enhancement - WinEPS now supports the use of Flexible Spending Account (FSA) cards. - FSA transactions will only function for POS systems and hosts that specifically support the FSA amounts and function calls. - The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing: - ACI - Concord EPC - Concord H&C - LX - Epic Tranz - WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. Full details on this feature are included in Section 2.

GlobalPay

Enhancement	Description
1. -No Change to Host -	---

LML

Enhancement	Description
1. -No Change to Host -	---

Lynk

Enhancement	Description
1. Add ECC to RBS Lynk host interface	- Enhancement - The Lynk host now supports Check transactions by routing them to Certegy. - The new check transaction options are "Check Guarantee/Verify" and "Electronic Check Conversion". - Check Guarantee/Verify supports both Personal and Commercial/Business checks. - Electronic Check Conversion supports only Personal checks. - Certegy supports the following check transaction types: - Purchase - Purchase w/ Cashback - New response codes have been added to support standard check and ECC transactions.
2. Remove hard coded offline forward timer value	- Enhancement - Previously, the timer for starting to forward offline transactions to the host was a hard-coded 1800 seconds. - This timer is now configurable as the "Secs to wait to cycle offline queue" option.
3. Lynk Host response changes	- Enhancement - The following response code has been added to the Lynk host: - Resp Code 000 - Card code CK - Term Action ND - Text: Decline - For response code 22, the text display has been updated from "VOID/RTRN" to "Approved." - For response code 000, the text display has been updated from "Approved Congratulations!!!" to "Approved."

Enhancement	Description
4. Receipt is not printing correctly	- Fixed - The receipt text for transactions to the Lynk host was not being properly created. This issue has been resolved and complete receipt text is now available. - Receipt text also now includes the time and date of the transaction.

LX1 & LX2 (Check) Hosts

Enhancement	Description
1. Length field included with RAW MICR	- Enhancement - When sending RAW MICR information to the host, a new length byte will be sent along as well in Field S-123.
2. Parsed MICR data returned by the LX host	- Enhancement - During Check transactions, the host will return parsed MICR data back to WinEPS in Bit 60. When this occurs, WinEPS will pass this parsed MICR data along to OpenEPS. - WinEPS will use this parsed MICR data to update its transaction record, overwriting the self-generated parsed data. - OpenEPS will reset its MICR field values with this new information and make this parsed data available to the POS through the standard MICR data function calls.
3. Send fid 'i' on Pre-Auth completions	- Enhancement - For Pre-Auth Completions and Reversals, FID 'i' will be sent to the host. - FID 'i' will be assigned the value of the FID 'h' that was received in the original Pre-Auth Request transaction. - If the Pre-Auth is not longer available or FID 'h' was blank, FID 'i' will be left blank.

Enhancement	Description
4. FSA Card Support	- Enhancement - WinEPS now supports the use of Flexible Spending Account (FSA) cards. - FSA transactions will only function for POS systems and hosts that specifically support the FSA amounts and function calls. - The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing: - ACI - Concord EPC - Concord H&C - LX - Epic Tranz - WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. Full details on this feature are included in Section 2.
5. LX EOD Correction	- Fixed - The LX host modules have been modified to correct an End of Day issue.

Mainsail

Enhancement	Description
1. -No Change to Host -	---

Mercury

Enhancement	Description
1. Version number updated	- Enhancement - The WinEPS version number sent up to the Mercury host has been updated to automatically use the version number of the WinEPS engine. - Previously the version number was hard coded as 818.

MPS (Fifth Third)

Enhancement	Description
1. Corrected Access Violation	- Fixed - Corrected an issue where an access violation was interrupting the End of Day process

MTX Receipt Capture Host

Enhancement	Description
1. ERC Host Definition screen should require Company and Store ID	- Fixed - The WinEPS GUI was previously allowing the ERC host information screen to be closed without the user entering the Company Number and Store ID. This has been corrected so that the user will be prompted to enter these values if they are left blank.

NOVA

Enhancement	Description
1. Cashback on ECC	- Enhancement - Updated the Nova host with their latest specification which allows cashback on Electronic Check Conversion transactions.

Paypoint

Enhancement	Description
1. -No Change to Host -	---

Pay by Touch

Enhancement	Description
1. -No Change to Host -	---

Shared (BigY)

Enhancement	Description
1. Card access violation in Big Y host	• Fixed • Problems in the parsing of transaction data would cause an access violation when WinEPS attempted to send a message to the Big Y host. This behavior would cause the connection to the host to bounce and has been corrected.

Terminal Code Changes

Hypercom ICE5500

Enhancement	Description
1. ICE SCAT Code 117	- Fixed - There was a WIC issue where if a set of RX dates were out of order, the ICE code would return an error. That rule has been modified so that as long as the dates are valid, no error will be generated based on the order they are passed in.

Hypercom ICE6000

Enhancement	Description
1. ICE SCAT Code 117	- Fixed - There was a WIC issue where if a set of RX dates were out of order, the ICE code would return an error. That rule has been modified so that as long as the dates are valid, no error will be generated based on the order they are passed in.

Hypercom L4100

Enhancement	Description
1. -No Change to Terminal Code -	---

Hypercom L4250

Enhancement	Description
1. -No Change to Terminal Code -	---

Ingenico eN-Crypt 2100

Enhancement	Description
1. -No Change to Terminal Code -	---

Ingenico eN-Touch 1000

Enhancement	Description
1. -No Change to Terminal Code -	---

Ingenico 6550

Enhancement	Description
1. -No Change to Terminal Code -	---

IVI C2000 Protégé

Enhancement	Description
1. -No Change to Terminal Code -	---

NCR 5993

Enhancement	Description
1. -No Change to Terminal Code -	---

Verifone Everest

Enhancement	Description
1. -No Change to Terminal Code -	---

Verifone MX830/MX850/MX870

Enhancement	Description
1. MX 830/850/870 Terminal Code 210U	New Terminal code

Verifone Omni 490

Enhancement	Description
1. -No Change to Terminal Code -	---

Verifone Omni 7000

Enhancement	Description
1. IBM Code Update	- Enhancement - The IBM Integration now supports the use of the Omni 7000 terminal. To facilitate future upgrades of the terminal, the latest SCAT code includes IBM specific upload commands. - The Omni 7000 requires an update to the latest SCAT code before it can be used with the IBM. - See the Known Issues Section for additional information.

VeriFone Vx670

Enhancement	Description
1. Support Vx670 wireless terminal	- Enhancement - WinEPS supports the use of the VeriFone Vx670 wireless terminal. - This terminal is supported for use with OpenEPS POS lanes. It functions similarly to other SCAT terminals. - Currently this terminal is supported for limited environments only. Contact MTX Support for additional information. Full details on this feature are included in Section 2.
2. Load latest MX670 Code	- Enhancement - Updated the WinEPS engine to delete previous version so fhte MX670 scat code, and add the latest version of the code to the FVersion.Txt file, to be sent down to the POS lanes. 823 SP1 did not send the latest scat version for the MX670 down to the lanes.
3. Vx670 reset	- Fixed - This terminal code will now reset every hour that the PIN pad is inactive to eliminate a communication issue.
4. Low Battery Warning	- Enhancement - Added new logic for low battery where the PIN pad will put up a message telling the cashier to sign off the PIN pad and return it to the cradle. The terminal will wait for an acknowledgement from the user before going back into the order.

Stand Beside Code Changes

IVI C2000 Protégé

Enhancement	Description
1. -No Change to Stand Beside Code -	---

Verifone Everest

Enhancement	Description
1. -No Change to Stand Beside Code -	---

Verifone Omni 490

Enhancement	Description
1. -No Change to Stand Beside Code -	---

Verifone Omni 3750

Enhancement	Description
1. 3750 errors	• Fixed • For the 3750 Stand Beside, there were two issues. First, when using the L – Customer OK Amount TAC, if the total amount was 9 cents or less the 3750 would crash. • Second, the 3750 was not passing the cashback amount in bit 054 for check purchases.
2. 3740 Stand Beside Issues	• Fixed • Updated code fixes an issue where changes to receipt header info in WinEPS were not being reflected on the 3740 terminal. • Multiple cashiers on one 3740 lane were not showing up in separate reports in WinEPS but instead were being reported under the first cashier signed on to the lane. For example, once cashier 5 signed on, all subsequent cashiers on that 3740 lane would show up in reports under cashier 5. This has been corrected • Encryption keys using leading F's could cause PIN errors on terminal. This code will accept those encryption keys. • After cycling power on the terminal or losing network connectivity, the configuration on the 3740 could become corrupt and not show tender keys. The terminal would have to be manually reloaded to fix this. This update corrects that behavior.

External Program Changes

Engine Monitor and Tray Icon

Enhancement	Description
1. -No Change to Engine Monitor and Tray Icon -	---

Host Simulator

Enhancement	Description
1. -No Change to Host Simulator -	---

IBM Integration

Enhancement	Description
1. IBM Display message using field separators	- Enhancement - To shorten the overall message length of communication sent to the IBM from OpenEPS, display messages have been changed to variable length fields, separated by field separators. Previously they were fixed length fields.
2. Redundancy of OpenEPS/WinEPS in IBM	- Enhancement - The IBM server now has the capability of being set up with a backup IP address for a second WinEPS server. With the backup IP address, should the connection to the primary server be lost, the IBM will attempt to connect to the WinEPS server at the backup address. - If the IBM succeeds in connecting to the backup server, it will direct all of the communications to that server until connection is lost, even if the primary server becomes available again. Full details on this feature are included in Section 2.
3. Support the H - Cashback Cashier TAC	- Enhancement - Support for the H - Cashback Cashier TAC has been added to the IBM interface.

Enhancement	Description
4. Prevent accidental card number entry	- Enhancement - The IBM POS now disables the manual entry of card number after the card read and transaction type has been resolved. This prevents accidental overwriting of the correct card number with a different card number during the sale procedure.
5. Support a specific minimum and maximum value per OpenEPS Bit.	- Enhancement - When requesting additional data from the POS, the IBM interfaces now enforces minimum and maximum data length. - The lengths required depend on the data requested and may specify an exact length to enter, such as in Phone Number where the expected number of digits is exactly 10.
6. Print receipts based off of ReceiptRequired field	- Enhancement - IBM now determines whether to print receipts based off the OpenEPS Receipt Required field setting. - Previously IBM receipt printing was based off of the tender type and response code.
7. Approved for Lesser Amount Support	- Enhancement - The IBM supports approvals for less than the full amount of the purchase. - If the host returns an approval, but indicates a lower amount than requested by the POS, the approved amount will be accepted and deducted from the amount owed by the customer.
8. Support the Omni 7000 terminal	- Enhancement - The IBM integration now fully supports the use of the Omni 7000 terminal. - The Omni 7000 requires an update to the latest SCAT code before it can be used with the IBM. - See the Known Issues Section for additional information.
9. Support WIC check type to Concord H&C	- Enhancement - The IBM interface now supports the WIC check type for the Concord H&C host.
10. Support long ECC receipt info	- Enhancement - The IBM has been updated to support the customizable, long disclaimer text supplied for ECC transactions. - The text information is sent to the IBM POS at sign on to increase the speed of printing and to decrease the amount of required messages.

Enhancement	Description
11. Bug in Debit Void (NI Response) Logic	- Fixed - A bug in the NI response code logic prevented it from working properly in the IBM interface; the issue has been corrected.
12. Reset properly when casback amount failed cashier verification	- Fixed - The IBM was not properly calling a reset when the L – Cashier OK Amount TAC was in use, and the Cashback amount was not approved by the cashier.
13. Update Stub with new functions	- Update - The Stub component of the IBM integration has been updated to allow the use of the latest OpenEPS function calls.
14. IBM Selective Data Entry	- Enhancement - The IBM Integration allows manager override of the following bits: 32 – Primary ID 33 – State Code 48 – PO Number 62 – Secondary ID Type 63 – Secondary ID # 68 – Driver ID 74 – Phone Number If a manager overrides a bit, the transaction will continue without requiring that bit to be set.

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. -No Change to Scanmaster Code -	---

Redundancy Service

Enhancement	Description
1. -No Change to Redundancy Service -	---

UpdateFiles.Exe

Enhancement	Description
1. -No Change to UpdateFiles.Exe -	---

Virtual Terminal 2

Enhancement	Description
1. Limit check number to 8 characters	- Fixed - Virtual Terminal was incorrectly allowing the entry of more than 8 digits for the check number field. This field entry has now been limited to 8 or less digits.
2. VT2 displays velocity data	- Enhancement - When velocity information is returned to OpenEPS as part of an NO decline (only), Virtual Terminal will give the option to display the velocity information to the cashier. - After viewing the velocity information the cashier has the option to override or cancel the transaction.

Enhancement	Description
3. NI Response Issue	- Fixed - On NI responses where the card slide was failed, Virtual Terminal was not cycling though the ValidateData routine and was instead sending the transaction even though it was incomplete. - Virtual terminal has been updated to properly cycle though the ValidateData routine.
4. Display warning if Void Last or Reprint Receipt unavailable	- Fixed - Virtual terminal cannot perform Void Last or reprint receipt for transactions that occurred prior to the current VT session. If the user attempts one of these transactions while no previous transactions are available, they should get a warning; VT was previously failing to display the correct warning.
5. VT supports * for Secondary ID	- Enhancement - Virtual Terminal now supports the use of the asterisk (*) character for entry on Secondary ID.
VT2 Check Error	- Fixed - Fixed issue with Duplicate Check error not displaying 5th line of cashier text with Solupay phone number.

Section 2

New Features

WinEPS Fixed Issues and Enhancements #1:

WinEPS Store Monitoring Service

Store Monitoring

As of 823, the older Status screen has been replaced with a more comprehensive status display tool. The new status screen features three tabs of information containing details on both WinEPS and each POS lane.

All data displayed on any of the status screen tabs is likely to be several minutes old. Information is gathered automatically about the status of WinEPS and the WinEPS Server, at a default time interval of 10 minutes. This interval time period may be increased or decreased through the use of a keyword in the Registry.MTX file: *EngineStatusInterval*.

However, OpenEPS lanes must be specifically configured to send status information to WinEPS. To display information about the OpenEPS lanes, it is necessary to utilize the OpenEPS.INI keyword, *LaneStatusInterval*.

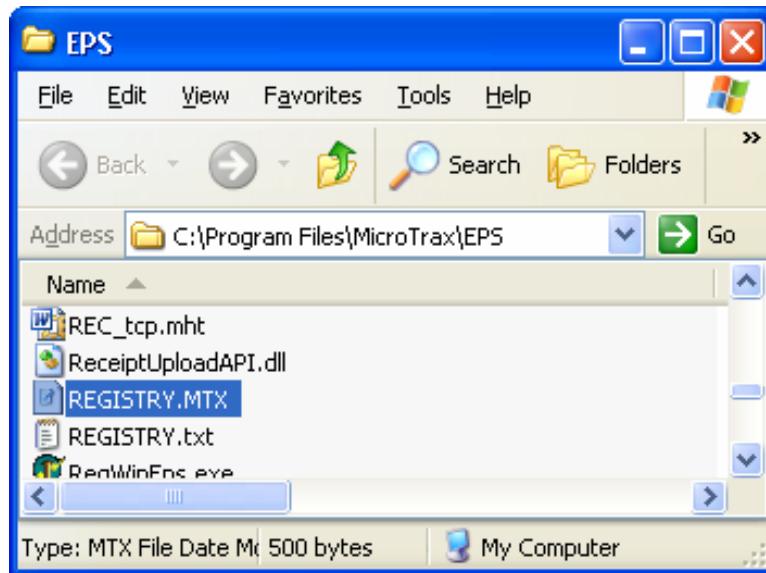


Configuring OpenEPS to send status messages will marginally increase network traffic. It is not recommended to configure this on an overloaded or already slow network.

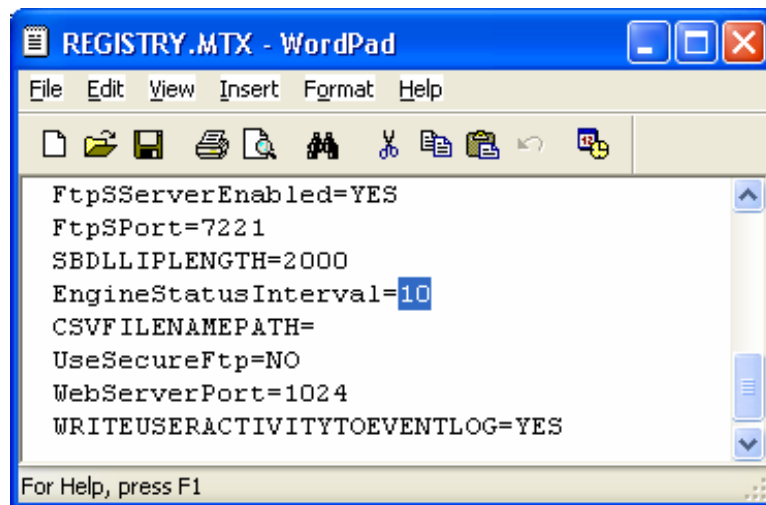
WinEPS Setup

WinEPS automatically defaults to recording its status every 10 minutes. To modify this interval, follow the steps below.

1. On your WinEPS server, explore to the \Program Files\MicroTrax\EPS directory.
2. Locate the Registry.MTX file.



3. Open the Registry.MTX file with a text editor such as WordPad or Notepad; Locate the *EngineStatusInterval* keyword.



4. Change value after the = sign to the desired time interval. The default is 10 and the value is in minutes; use whole integers only. Setting a 0 value disables the updating, which is not recommended.

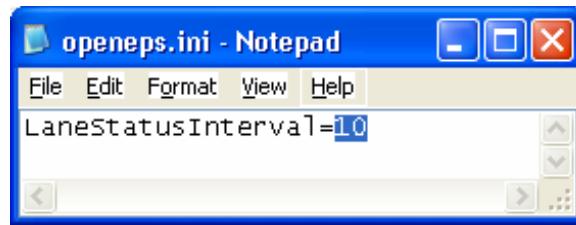
OpenEPS (POS Lane) Setup

To setup the OpenEPS lanes to supply status information to the WinEPS server, it is necessary to create or update the OpenEPS.INI file with the keyword *LaneStatusInterval*.

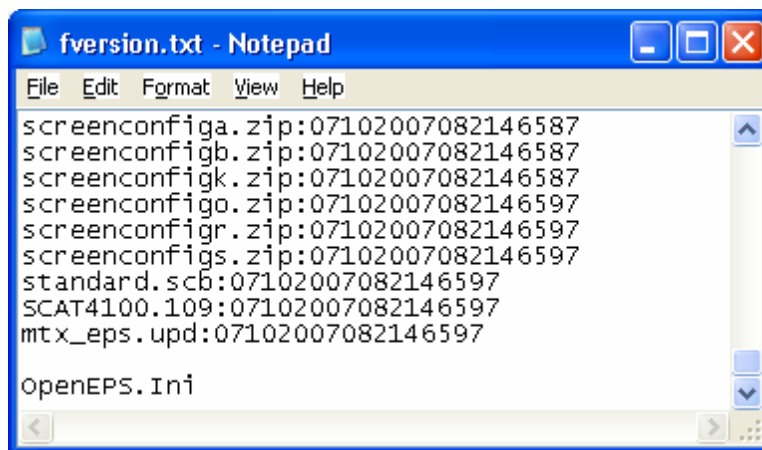
Follow the steps below to update your lanes to use the Store Monitoring Service.

1. Determine if the POS lanes already have an OpenEPS.INI file. On your POS lane, go to the \Program Files\MicroTrax\OpenEPS\ directory; search for the OpenEPS.INI file.
2. If the POS lane already has an OpenEPS.INI file, open the file with a text viewer and determine what settings in the file are to be retained. Refer to the OpenEPS.INI File Settings

section of Chapter 10 for additional information on OpenEPS.INI keywords. If the OpenEPS.INI file is not already present, it can be created by making a new text file and naming it "OpenEPS.INI".



3. Determine if you want a universal setting that will propagate to all OpenEPS lanes, or if you want to configure only individual lanes.
 - To configure a lane individually, add the line LaneStatusInterval=10 to the OpenEPS.INI file and save the change. The '10' indicates that the lane will send status messages to WinEPS every 10 minutes; the minimum value is 1 minute. Repeat this for each lane you wish to configure.
4. To create a universal setting, copy or create the OpenEPS.INI file in the\Program Files\MicroTrax\EPS\ directory on your WinEPS server. Add the line LaneStatusInterval=10 to the file and save it.
5. Locate the FVersion.Txt file in the EPS directory.
6. Open the FVersion.Txt file with a text editor; at the bottom of the file on a blank line, enter the file name: OpenEPS.INI



7. Save the FVersion.Txt file, and the next time WinEPS is stopped and restarted, the OpenEPS.INI file will be sent down to each POS lane when they connect to WinEPS.

EPS Status Screen Information

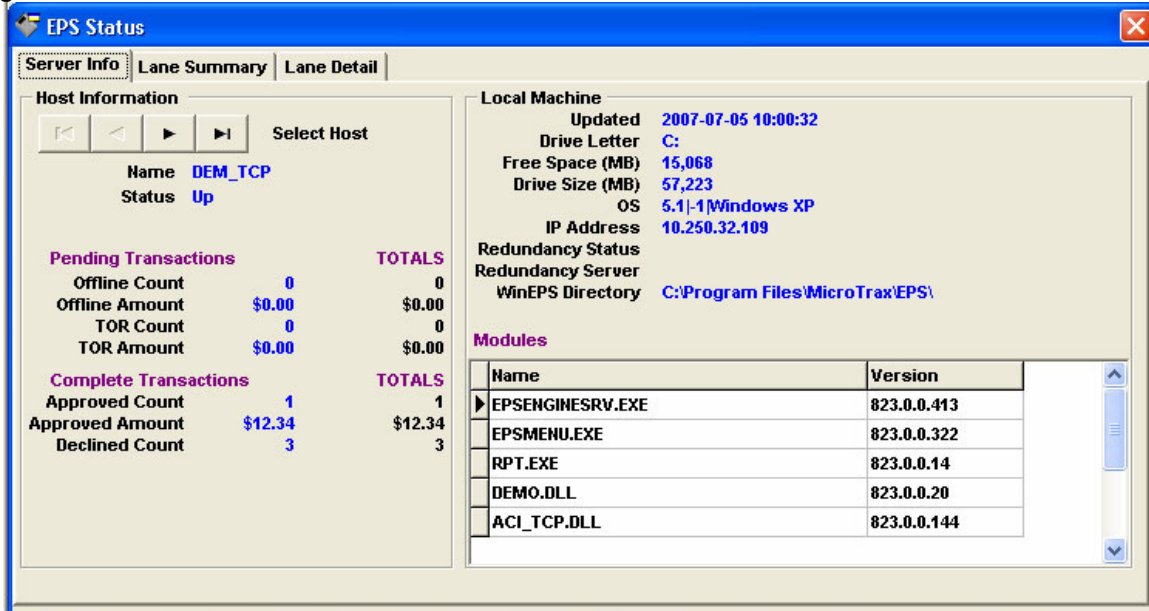
From the EPS Status window, you can look into the state of various WinEPS related processes.

System Status – Screens

The Status screen has three separate tabs of information. The information on the status screen is not in real time; instead how often it is updated is determined by configurable intervals.

Server Info Tab

This tab displays an overview of WinEPS, including transactions, server information and program module versions.



Server Info Tab

Host Information Frame

Screen Item	Description
Selection Arrows	These arrows allow the user to select which host to display information for, if WinEPS is configured with multiple hosts. If only one host is defined, the arrows will be grayed out.
Name	The name of the currently selected host. Each host has a three character designation, an underscore, and then three characters that describe the communication type used for that host.
Status	Host status, as of the last status update.
Pending Transactions	The amounts in this section refer to offline transactions that are currently held at WinEPS, waiting to be processed to this host when the host becomes available. - Offline Count – Number of offline transactions waiting to be processed. - Offline Amount – Total dollar amount of offline transactions - TOR Count – Number of Time Out Reversals - TOR Amount – Dollar amount of the Time Out Reversals If the host is currently up, offline transactions will be trickled up to the host one at a time until they have all been resolved. The TOTALS column shows the store totals for the indicated item across all defined hosts.

Screen Item	Description
Complete Transactions	This section shows the number and amount of finalized transactions for the host currently displayed. - Approved Count – Number of approved transactions - Approved Amount – Total dollar amount of approved transactions - Declined Count – Number of transactions declined by the host The TOTALS column shows the store totals for the indicated item across all defined hosts.

Local Machine Frame

Screen Item	Description
Updated	The date and time of the last status update. All information displayed is accurate as of the last status update and is not displayed in real time. The frequency of status updates may be increased or decreased; see Chapter 10, WinEPS Store Monitoring Service for details on interval setup.
Drive Letter	Indicates the drive on which WinEPS is installed.
Free Space (MB)	Indicates the amount of free space available on the hard drive where WinEPS is installed.
Drive Size	Displays the total size of the hard drive.
OS	Operating System in use; information is displayed as returned directly from the OS query.
IP Address	The IP address of the WinEPS server. If the server has multiple IP addresses, such as from multiple NIC cards, only the first IP address will be displayed.
Redundancy Status	{Currently Unavailable}
Redundancy Server	{Currently Unavailable}
WinEPS Directory	The directory path where WinEPS has been installed.
Modules	This section displays the program modules in use by WinEPS along with their version number.

Lane Summary Tab

This tab gives a short summary of activity reported by each OpenEPS lane. To report activity, each lane must be specifically configured to send a status message to WinEPS; refer to the Chapter 10, WinEPS Store Monitoring Service section for information on configuring the status message interval.

Lane	Offline Count	Offline Amount	Tor Count	Tor Amount
1	0	\$0.00	0	\$0.00
SUM	0	\$0.00	0	\$0.00

Screen Item	Description
Lane	Lane Number
Offline Count	Number of offline transactions residing on the lane waiting to be sent to WinEPS.
Offline Amount	Total dollar amount of offline transactions on the lane waiting to be sent to WinEPS.
TOR Count	Number of Time Out Reversals for the lane.
TOR Amount	Dollar amount of the Time Out Reversals.
Sum	Displayed the bottom of the screen; Total of all lanes for each column.

Lane Detail Tab

EPS Status

Server Info | Lane Summary | **Lane Detail**

Lane Information

Lane **1**

Type **OpenEPS TCP/IP**

Update Time **2007-07-03 16:08:26**

Drive **C:** MB Free: **14,982** MB Total: **57,223**

OS Version **5.1|-1|Windows XP**

IP Address **10.250.32.109**

POS App Version **823.0.0.30**

BioStatus **Not Connected**

Pending Transactions

	Count	Amount
Offline	0	\$0.00
TOR	0	\$0.00

PinPad

Term Type **NONE**

App Version **0000**

Data Version **0000**

OS Version

Model Number

Serial Number

Terminal Config File

Name **Virtual Terminal.xml**

Version **7**

Card Processing Profile File

Name **CardProcessingProfile.xml**

Version

Lane Modules

Name	Version
MTX_POS.dll	823.0.0.9
MTX_EPS.dll	823.0.0.567

Lane Information Frame

Screen Item	Description
Selection Arrows	These arrows allow the user to select which lane to display information for. The arrows will only allow selection of lanes that have sent a status message to WinEPS.
Lane	Lane Number
Type	Lane Type; based on the communication method used between WinEPS and the lane. The only lane that currently supports this status message is the 'OpenEPS TCP/IP' communication type to OpenEPS.
Update Time	The date and time of the last status update. All information displayed is accurate as of the last status update and is not displayed in real time. OpenEPS lanes do not report their status by default and must be specifically configured to do so. The frequency of status updates may be increased or decreased; see Chapter 10, WinEPS Store Monitoring Service for details on interval setup.
Drive	Indicates the drive on which OpenEPS is installed and running.
MB Free	Indicates the amount of free space available on the hard drive for the indicated POS lane.
MB Total	Displays the total size of the hard drive.
OS Version	Operating System in use at the lane; information is displayed as returned directly from the OS query.
IP Address	The IP address of the OpenEPS POS Lane. If the lane has multiple IP addresses, such as from multiple NIC cards, only the first IP address will be displayed.
BioStatus	Displays the status of the Biometrics interface. If Biometrics is not configured for the given POS lane, the 'Not Connected' status will be displayed.

Pending Transactions Section

Screen Item	Description
Offline	Number (Count) and dollar amount (Amount) of the offline transactions currently stored on the lane that have yet to be sent up to WinEPS as of the last status update.
TOR	Number (Count) and dollar amount (Amount) of the Time Out Reversal transactions processed by the lane.

PinPad Section

Screen Item	Description
Term Type	SCAT Terminal Type in use at the POS lane
App Version	{Currently Unavailable}
Data Version	{Currently Unavailable}
OS Version	{Currently Unavailable}
Model Number	{Currently Unavailable}
Serial Number	{Currently Unavailable}

Terminal Config File Section

Screen Item	Description
Name	Configuration File Name

Screen Item	Description
Version	Version number of the configuration file; the version number is internally incremented each time a change is made to the configuration.

Card Processing Profile Section

Screen Item	Description
Name	Card Processing Profile file in use at this lane.
Version	{Currently Unavailable}

Lane Modules Section

This section displays the OpenEPS program modules in use at the POS lane along with their version number.

WinEPS Fixed Issues and Enhancements #3:

WinEPS Web Server & Web Lanes

Web Server Information

The WinEPS Web Server is a service that allows web-based POS client software to connect up to WinEPS directly and to process transactions through the WinEPS payments application.

To secure transaction information, the WinEPS Web Server utilizes an SSL connection between the server and the client software.

To enable the WinEPS Web Server, simply define a Web lane following the instructions below. To disable the Web Server, remove any Web lanes that are currently defined. If no Web lanes are defined, the Web Server will not start.

The WinEPS Web Server supports the following tenders and transaction types:

- Credit Purchase & Return
- Gift Card Purchase & Return
- TOR Transactions at WinEPS
- Pre-Authorization / Completion

When a Web Lane Client signs onto WinEPS, it does not connect to a specific Lane Number; instead it connects to the first open Web Lane. This means that any lane may receive the transaction; this is important for both configuration and for reporting purposes. For configuration, this means that all web lanes must be setup with the same Card Processing Profile (as noted in the instructions below). For reporting, this indicates that a single client application cannot be tracked by lane number and should be tracked by cashier number instead.

MTX does not supply a web client interface at this time. For information on the web client requirements or developing to the WinEPS Web Server specification, contact the MTXEPS Support or Sales Team.

Setup

To configure the Web Server on WinEPS, follow the steps below:

1. In the WinEPS GUI, go to Site Information | Processing Options.
2. Select the Other Tab.

The screenshot shows the 'Processing Options' dialog box with the 'Other' tab selected. The dialog has a blue title bar and a tabbed interface. The tabs are 'System Operation', 'Payment Terminal Settings', 'Backup', 'CSV Export', and 'Other'. The 'Other' tab is active and contains three sections: 'FTP Server Settings', 'IBM Settings', and 'Web Server Settings'. In the 'FTP Server Settings' section, there is a checkbox for 'FTP Server Enabled' which is checked, a 'Port' field with the value '6221', and a checkbox for 'Use Secure FTP' which is unchecked. Below this is a text field for 'Path to MTXAuth.dat file for SCANMASTER' with the value 'c:\scanldos\grocery\files\'. The 'IBM Settings' section contains four text fields: 'IP Address of Primary IBM Server', 'IP Address of Backup IBM Server', 'IBM FTP User Name', and 'IBM FTP Password'. The 'Web Server Settings' section contains a 'Port' field with the value '1024'. The dialog box has a standard Windows-style scrollbar on the right and bottom.

3. Under Web Server Settings, the default Port of 1024 is displayed. Generally this port setting is fine, but might need to be changed if this port is already in use on the WinEPS server PC, or if other network settings require it.
4. Click the Save button at the lower right to save any changes.
5. Next, go to Site Information | Lane Definition to set up your available POS lanes.
6. To add a new web lane, click the Add button.
7. At the bottom of the screen, use the Terminal Type dropdown box to select 08 – Web Lane. This will set the lane to accept connections from a web client and will automatically enable the Web Server on WinEPS.

Lane	Term Type	Config [Number]/Name	Card Processing Profile	AutoStart	heTy
1	08 - Web Lane	Web Lane Configuration	CardProcessingProfile.xml	Y	

Lane Information

Terminal Type: 08 - Web Lane
Configuration: 01 - Verifone 485 LAN, 03 - C2000 485 LAN, 04 - OpenEPS TCP/IP, 05 - ScanMaster integ., 08 - Web Lane (selected), 09 - MTX AutoTran, 10 - OpenIP TCP/IP, 11 - ISO (socket per lane), 12 - ISO (single socket)
Card Processing Profile FileName:
Lane Number:
Receipt Type:

Select

Add Delete Change Print Save Cancel Close

- All web lanes must be configured to use the same Card Processing Profile. This is because web lanes do not connect to specific lanes and instead connect to the first open lane. Failure to configure the same Card Processing Profile for each lane will result in lanes that randomly change what profile they utilize among the ones defined.



Web Lanes (08 – Web Lane) must be configured to all use the same Card Processing Profile.

Lane Information

Terminal Type: 04 - OpenEPS TCP/IP
Configuration FileName: Your Config.xml
Card Processing Profile FileName: CardProcessingProfile.xml
Lane Number: 1
Receipt Type: Large
Lane Type: Normal
Auto Start: Y

Select

Select

Add Delete Change Print Save Cancel Close

- At this time you may configure any of the other settings for the lane, such as choosing a lane number.

The screenshot shows a window titled "Lane Definitions" with a table and a configuration section below it.

Lane	Term Type	Config [Number]Name	Card Processing Profile	AutoStart	heTy
1	08 - Web Lane	Web Lane Configuration	CardProcessingProfile.xml	Y	

Below the table is a "Lane Information" section with the following fields:

- Terminal Type: 08 - Web Lane
- Configuration: Web Lane Configuration
- Card Processing Profile FileName: CardProcessingProfile.xml (with a "Select" button)
- Lane Number: 1
- Lane Type: Normal
- Receipt Type: Large
- Auto Start: Y

At the bottom are buttons: Add, Delete, Change, Print, Save, Cancel, and Close.

10. Click the Save button at the bottom to save your lane settings.
11. You may add additional Web lanes using the same process; you must have one lane defined for each Web Client POS Lane that will connect to WinEPS.
12. The next item to configure is the hosts to which transactions will be processed. If you are using OpenEPS lanes, follow the standard procedures for setting up hosts in your OpenEPS configuration. If you have otherwise already set up your hosts for your WinEPS server, then your configuration is complete. If you have not set up your hosts or would like to review the host settings, go to Configuration | Terminal Configuration > Fuel Lanes.

Fuel Lane Configuration

Tenders Accepted at Pump

Trx Type	Host Selected for Tran Type	Allowed Transactions (Click to Change Status)
Debit	DEMO (MicroTrax)	✓ Accepted
Credit	DEMO (MicroTrax)	✓ Accepted
EBT FS	DEMO (MicroTrax)	✗ Not Accepted
EBT Ca	DEMO (MicroTrax)	✗ Not Accepted
Priv Cr	DEMO (MicroTrax)	✗ Not Accepted
Priv Db	DEMO (MicroTrax)	✗ Not Accepted
Gift Card	DEMO (MicroTrax)	✗ Not Accepted
PhnCard	DEMO (MicroTrax)	✗ Not Accepted
Wireless	DEMO (MicroTrax)	✗ Not Accepted
ACH	DEMO (MicroTrax)	✗ Not Accepted
Check	DEMO (MicroTrax)	✗ Not Accepted
Fleet	DEMO (MicroTrax)	✓ Accepted

Change Host Selection

Default Tender

Default Tender for Tender Resolve Message: Unresolved

Miscellaneous Settings

Number to add to Pump Number:

Save Cancel

13. On the Fuel Lane Configuration screen, click the Change Host Selection button. If the WinEPS service is running, a warning will be displayed indicating that it needs to be shut down; agreeing to the warning will automatically shut the service down.
14. Use the dropdown box next to each tender type to select the host to which that tender should be routed.

Fuel Lane Configuration

Tenders Accepted at Pump

Trx Type	Host Selected for Tran Type	Allowed Transactions (Click to Change Status)
Debit	DEMO (MicroTrax)	✓ Accepted
Credit	ACI Host	✓ Accepted
	Albertsons Host	✓ Accepted
	Ascendant Host	✗ Not Accepted
EBT FS	bioPay	✗ Not Accepted
	Chase Host	✗ Not Accepted
EBT Ca	Concord:EPC	✗ Not Accepted
	Concord:H&C	✗ Not Accepted
Priv Cr	Concord:Memphis	✗ Not Accepted
	DEMO (MicroTrax)	✗ Not Accepted
Priv Db	EPICTranz	✗ Not Accepted
	GlobalPay	✗ Not Accepted
Gift Card	LML host	✗ Not Accepted
	Mercury host	✗ Not Accepted
PhnCard	LX1	✗ Not Accepted
	LX2 - Check	✗ Not Accepted
Wireless	Lynk Systems Inc	✗ Not Accepted
	Mainsail Check	✗ Not Accepted
ACH	MPS	✗ Not Accepted
	Nova	✗ Not Accepted
Check	Paypoint	✗ Not Accepted
	Pay By Touch	✗ Not Accepted
Fleet	Shared (Big Y)	✓ Accepted
	NOT DEFINED	✗ NOT Accepted

Save Host Selection

Default Tender

Default Tender for Tender Resolve Message: Unresolved

Miscellaneous Settings

Number to add to Pump Number:

Save Cancel

- Once you have selected hosts for each transaction type that will be used, click the Save Host Selection button and WinEPS will open the Host Configuration screen.

Host Processor Definition: ACI Host

Host Info | **Response Codes**

ACI Host

Controller ID:
Store Number:
Check Auth Type:
Merchant Type (5411):
Currency Code (840):
Settlement Report:
Convert GC Refund to Recharge: ☐
Phone Card uses mag stripe: ☐
Online Processing
Verify Debit Card Prefix: ☐
Trace Host Messages to Journal: ☒
Offline Processing
☐ Offline Processing Allowed?
☐ Verify Debit Card Prefix?
☐ Resubmit Offline Forwards?
04 Secs to wait to simulate approval
00060 Secs to wait to begin forwarding
00015 Secs to wait between forwards
00600 Secs to wait to cycle offline queue
00120 Secs to wait to cycle reversal queue
TCP/IP Socketting Connection
Host TCP/IP Address or Name:
Host Port:
Local Port:
Primary: Ping
Backup: Ping
Transaction Information

Transactions allowed (reference only - change in term config)	Online Timeout Value	Truncate Pan on Receipt?
Debit	☒ 45	☒
Credit	☐ 45	☒
EBT Food Stamp	☐ 45	☒
EBT Cash Benefit	☐ 45	☒
Private Credit	☐ 45	☐
Private Debit	☐ 45	☐
Gift Card	☐ 45	☐
Phone Card	☐ 45	☐
Wireless	☐ 45	☐
ACH	☐ 45	☐
Check	☐ 45	☐
Fleet Card	☐ 45	☐

Buttons: **Help**, **Fleet Table**, **Save**, **Save and Close**, **Cancel**

16. The selected host configuration screen will be displayed; the host will have supplied merchant configuration information that is entered on this screen. Use the supplied host information to fill out any host required information at the top of the screen, along with the Host ECP/IP Address or Name and Host Port at the bottom.
17. Once the required information is entered, select Save and Close.
18. WinEPS will return to the Fuel Lane Configuration screen. Click Save to save any settings; if Save is not available simply click Cancel to exit.

WinEPS Fixed Issues and Enhancements #5:

Flexible Spending Account Card Support

FSA Cards

WinEPS supports the use of Flexible Spending Account (FSA) cards. FSA Cards will be processed as credit cards, and will be differentiated from standard credit cards based on the FSA Prefix Table, similar to the way the Debit BIN Prefix Table identifies valid Debit Cards.

Merchants must get their FSA Bin file from their acquirers (i.e. their Host or directly from credit companies).

FSA transactions will only function for hosts that specifically support FSA-specific amounts. The following hosts have provided specifications that include FSA amounts and are supported for FSA with WinEPS; however, these hosts are not guaranteed to currently provide FSA processing:

- ACI
- Concord EPC
- Concord H&C
- Demo
- LX
- Epic Tranz

WinEPS has not certified FSA transactions to any host at this time. Certification is currently scheduled for September of 2007. Be sure to check directly with your host to determine their FSA processing status.

For POS systems to process FSA transactions, the POS must support the function calls, set specific FSA transaction amounts and utilize the 'Approved for Lesser Amount' logic. The following POS systems support FSA transactions:

- IBM 4690 OpenEPS Integration

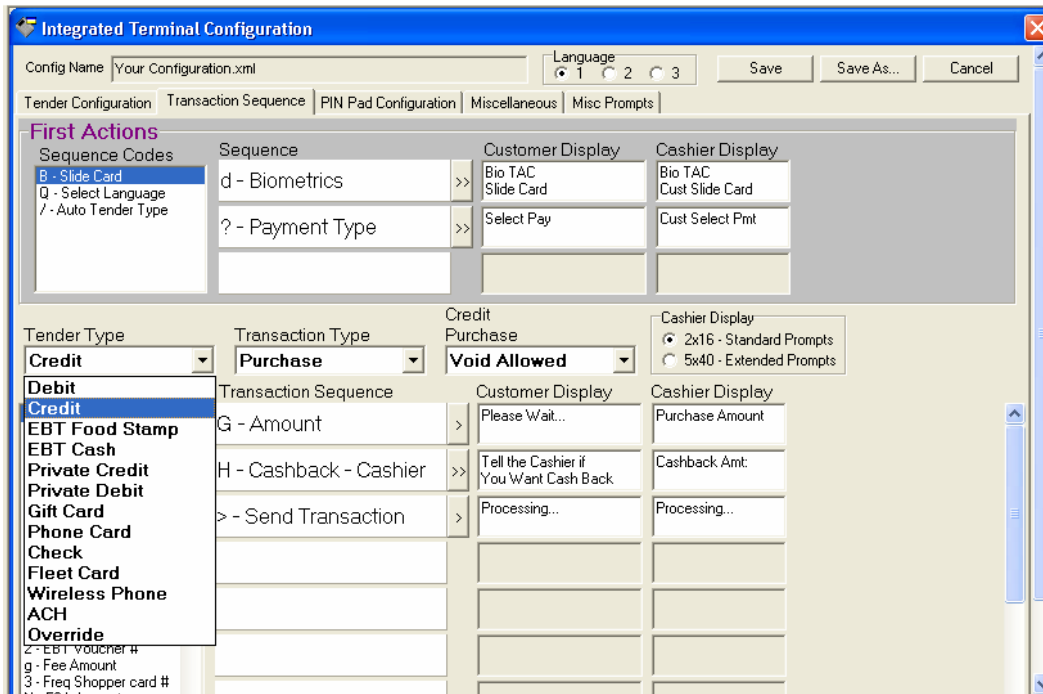
For complete information on integrating a POS to OpenEPS FSA functions, refer to the OpenEPS Specification or contact WinEPS Support.

FSA transactions use TACs to process FSA specific transaction amounts. The following TACs are associated with FSA:

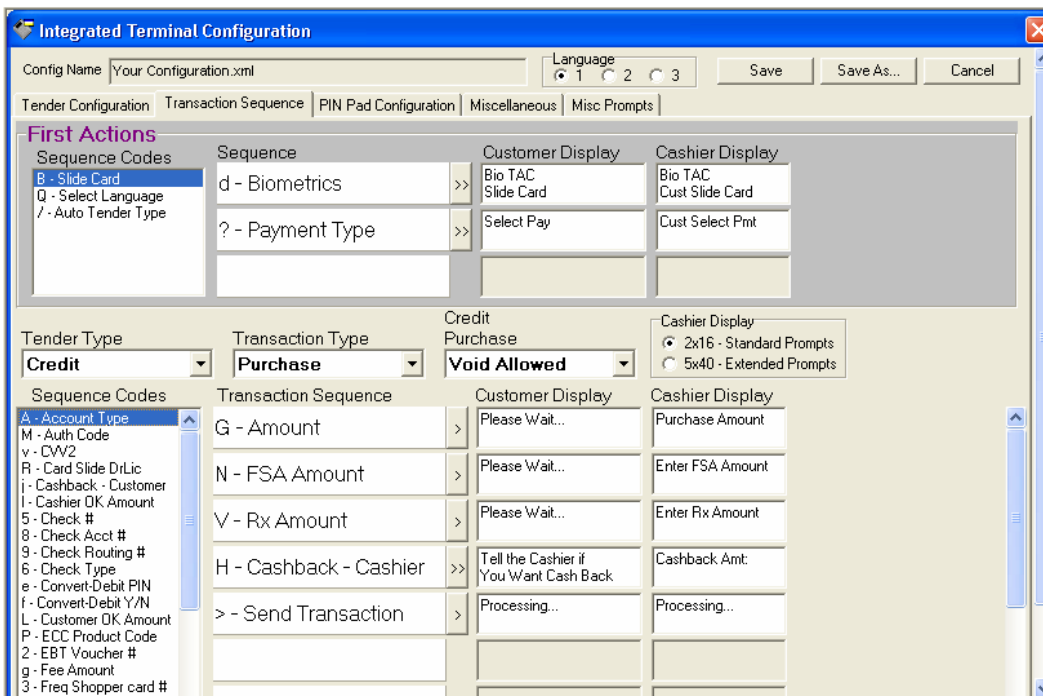
- TAC 'N' - FSA Amount (Bit 102)
- TAC 'V' - Rx Amount (Bit 103)

To set up the FSA in WinEPS, follow the steps below;

1. In WinEPS, go to Configuration | Terminal Configuration > OpenEPS Lanes
2. Choose the terminal configuration file in use.
3. Go to the second tab, Transaction Sequence.



- Use the drop down box under Tender Type to select Credit. Verify that Transaction Type is set to Purchase.



- Drag the N – FSA Amount TAC and the V – Rx Amount TAC into the transaction sequence as shown above. They should be placed before the > - Send Transaction TAC and before any Cashback TACs.
- Click Save to save the changes.

7. Go to Configuration | Allowable Card Prefixes
8. Select Credit Card. Each credit card has an associated FSA code for processing. This FSA code defaults to HB as shown below and is thus linked to the HB card processing profile.

Credit Prefixes

Select Tender Type

- Credit Card**
- Debit Card
- Private Label Credit Card
- Private Label Debit Card
- Check Auth
- EBT Foodstamp Card
- EBT Cash Benefit Card
- Gift Card
- Fleet Card
- Phone Card
- Prepaid Wireless
- ACH

Card Data	Length	Card Code	FSA	AutoTender?
34XXXXXXXXXX	XX	AX	HB	Included
36XXXXXXXXXX	14	MC	HB	Included
37XXXXXXXXXX	XX	AX	HB	Included
4XXXXXXXXXXXX	13	VS	HB	Included
4XXXXXXXXXXXX	16	VS	HB	Included
51XXXXXXXXXXXX	16	MC	HB	Included
52XXXXXXXXXXXX	16	MC	HB	Included
53XXXXXXXXXXXX	16	MC	HB	Included
54XXXXXXXXXXXX	16	MC	HB	Included
55XXXXXXXXXXXX	16	MC	HB	Included
6011XXXXXXXX	16	DS	HB	Included
622XXXXXXXXXX	XX	DS	HB	Included
6245XXXXXXXX	XX	DS	HB	Included
6388XXXXXXXX	XX	DS	HB	Included
650XXXXXXXXXX	XX	DS	HB	Included
6858XXXXXXXX	XX	DS	HB	Included
9400XXXXXXXX	XX	DS	HB	Included
955XXXXXXXXXX	XX	DS	HB	Included
9688XXXXXXXX	XX	DS	HB	Included
9843XXXXXXXX	XX	DS	HB	Included
9988XXXXXXXX	XX	DS	HB	Included

Tender Type: Credit

Card Data (X=match any digit): 34XXXXXXXXXX

PAN Length (X=any length): XX

Card Code: AX

FSA Code: HB

Exclude this prefix from Auto Tender resolution ☐

**Number cannot be followed by 'X' in Card Data
Prefix Length must be 01 - 99 or 'XX'**

New Save Delete Print Close

9. The default of the HB card profile is to not take FSA cards while offline due to them effectively being a stored value card, with additional restrictions. You may change the way FSA cards are handled by editing the HB card processing profile. You may individually configure FSA cards for specific prefixes by creating a new card profile and setting the FSA Code for the desired prefixes to the new card code that you create. To create a new card profile, you may go to Configuration | Card Processing Profiles and use the Add button to create a new profile.
10. Go to Configuration | FSA Prefix Table

The screenshot shows a window titled "FSA Prefix Table". It contains a table with the following data:

From Prefix	To Prefix	PAN Len	Bank Name
00000000000000	99999999999999	XX	FSA CARD

Below the table is a section titled "FSA BIN Prefix" with a form containing the following fields:

- From FSA BIN Prefix: 00000000000000
- To FSA BIN Prefix: 99999999999999
- PAN Length (XX=Any Length): XX (dropdown menu)
- Bank Name: FSA CARD

On the right side of the form are buttons: New, Change, Save, Delete, Print, and Close.

11. The default FSA prefix table will appear as shown above, allowing any credit card to be accepted as a potential FSA card; a full FSA prefix list will instead display many prefix ranges, listing the ranges that are currently in use for FSA cards. Be sure to acquire or download a full FSA prefix file; contact MTX Support for information on acquiring an FSA prefix file.

IBM Integration Fixed Issues and Enhancements #2:

Redundant WinEPS/OpenEPS/MultiEPS systems

The IBM system allows for configuring two IP addresses, a Primary and a Secondary, where it will expect WinEPS/OpenEPS/MultiEPS servers.

The IBM back office server must connect to a Windows server running WinEPS, MultiEPS and OpenEPS. Typically, IBM uses only the Primary IP address when connecting; however, with the addition of the backup IP address, should the connection to the primary server be lost, the IBM will attempt to connect to the WinEPS server at the backup address.

If the IBM succeeds in connecting to the backup server, it will direct all of the communications to that server until connection is lost, even if the primary server becomes available again.

Setup

Follow the installation instructions in IBM Integration Guide, Chapter 2 for setting up WinEPS/MultiEPS; WinEPS/MultiEPS will naturally need to be installed to two separate Windows PCs when implementing a redundant system. The Primary and Secondary WinEPS and MultiEPS systems should be configured the same way to avoid changes when switching between them.

The section IBM Back Office Settings, detailing the setup of the MTXSNDBG.INI file where the IP addresses of the Primary Windows PC and Secondary Windows PC are configured.

Limitations

The redundant systems are designed for a fully manual transition. The user must follow the steps described below in the Transitioning Between Servers section.

This system does not reconcile transaction sent to the Primary with transactions set to the Secondary WinEPS server; therefore if a store switches between them during a business day, the final store totals would be the combined totals for both servers.

This system may be used with the WinEPS Redundancy Service (to keep the Secondary WinEPS program updated with any changes to the primary), but certain considerations need to be made:

- First, WinEPS redundancy does not extend to MultiEPS, so MultiEPS and its configurations and log files would have to be manually transferred to the secondary when changes are made.
- Second, when transitioning from the Primary to the Secondary, the primary WinEPS must be shut down and the primary Redundancy service must be stopped. If the primary redundancy service is restarted after a transition to the Secondary server, **all WinEPS information on the Secondary server will be lost.**

Both the Primary and Secondary WinEPS and MultiEPS services should not be running at the same time. As part of the transition process, it will be necessary to shut down the services that IBM is currently connected to and start the other ones; do not leave either the WinEPS or MultiEPS service started for a server that is not actively being used.

Transitioning Between Servers

To transition between servers, follow the steps below:

1. If this is a graceful transition where the currently used WinEPS server is still running, sign off all the POS lanes before proceeding to ensure a smooth transition.
2. Go to the server that the IBM is currently connected to; this is likely to be the Primary WinEPS server. Stop the WinEPS service and the MultiEPS service. This can be done by going to the individual programs, going to the Windows services, or issuing the following command lines:
 - Net stop WinEPS
 - Net stop MultiEPS
3. If the server crashed, or you are otherwise unable to confirm that the services are indeed stopped, disconnect the server from the network.
4. On the other server, typically the Secondary, start the WinEPS service and the MultiEPS service. Again this can be done by going to the individual programs, going to the Windows services, or issuing the following command lines:
 - Net start WinEPS
 - Net start MultiEPS
5. At this point the IBM should connect up the currently active server and be ready for the POS lanes to sign on. If the server crashed or the transition was otherwise not graceful, the POS lanes will have to be signed off and then signed back on before they will be ready to take transactions.

These instructions may be followed to transition from Primary to Secondary or from Secondary to Primary. Be aware that transactions processed on one server will not be available to the other server, and therefore voids (for example) will not function properly if the original transaction was taken on a different server than is currently active.

SCAT Code Changes, VeriFone Vx670 #1:

VeriFone Vx670

The VeriFone Vx670 is a wireless terminal currently supported for limited OpenEPS environments only. Before employing the Vx670, contact MTX Support for specifics on the supported environments.

WinEPS includes a default Vx670 WinEPS configuration file called StoreLine with Vx670 term.xml.

As with all wireless networks, it is responsibility of the merchant to install this terminal securely and utilize it according to PCI best practices for wireless networks. For additional information on PCI requirements, refer to the separate WinEPS Users PCI Recommendations Guide document as well as the latest PCI requirements (www.pcisecuritystandards.org).

Loading SCAT Code on the Vx670 Terminal

Manual SCAT Loading

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

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

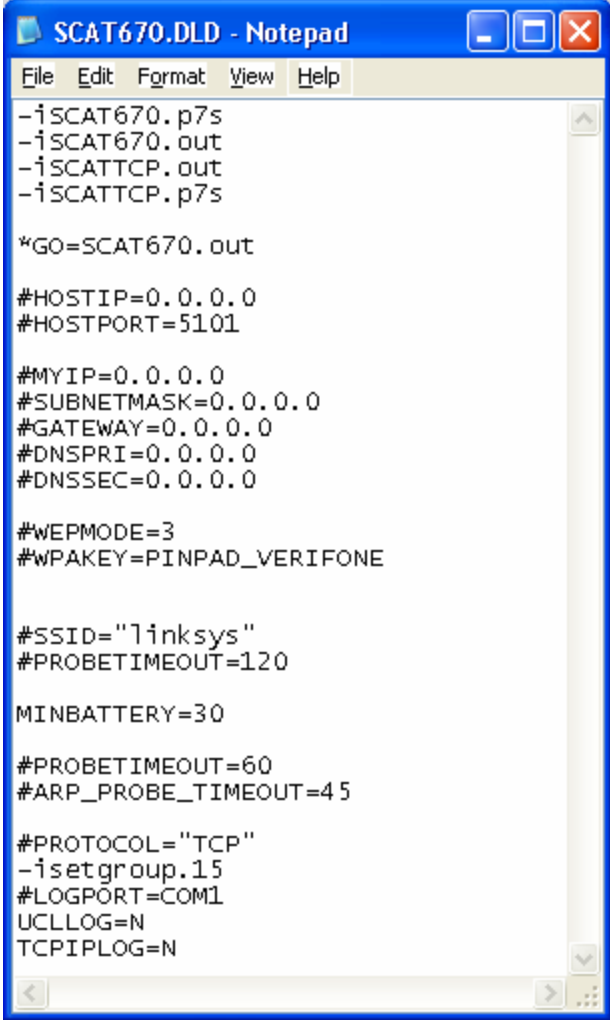
1. Locate & Unzip the SCAT Code
2. Setup the SCAT670.DLD Configuration File
3. Set Terminal to download
4. Run a Command Line Batch File

Locate & Unzip the SCAT Code

1. Browse to the WinEPS Installation CD.
2. Go to the \OpenEPS\SCAT Code\Vx670 directory; locate the 'SCAT - Vx670 vXXXX.zip' file where XXXX is the current version number.
3. Extract the zip file to a convenient location on the computer where the Vx670 will be attached.

Setup the SCAT670.DLD Configuration File

4. In the unzipped files, locate the 'SCAT670.DLD' file; open the file using a text editor such as WordPad or Notepad.



```

-iSCAT670.p7s
-iSCAT670.out
-iSCATTCP.out
-iSCATTCP.p7s

*GO=SCAT670.out

#HOSTIP=0.0.0.0
#HOSTPORT=5101

#MYIP=0.0.0.0
#SUBNETMASK=0.0.0.0
#GATEWAY=0.0.0.0
#DNSPRI=0.0.0.0
#DNSSEC=0.0.0.0

#WEPMODE=3
#WPAKEY=PINPAD_VERIFONE

#SSID="linksys"
#PROBETIMEOUT=120

MINBATTERY=30

#PROBETIMEOUT=60
#ARP_PROBE_TIMEOUT=45

#PROTOCOL="TCP"
-i setgroup.15
#LOGPORT=COM1
UCLLOG=N
TCPIPLOG=N
  
```

5. Modify the following lines to comply with your wireless environment:

Parameter	Description
#HOSTIP=XXX.XXX.XXX.XXX	Specify the IP address of the lane to which this PIN pad will connect.
#HOSTPORT=XXXX	Specify the port number set in your WinEPS PIN pad configuration for the Vx670. See the Vx670 WinEPS Setup section below for details about setting the port in WinEPS.
#MYIP=XXX.XXX.XXX.XXX	The Vx670 supports either Static IP or DHCP. If using DHCP, this IP address should be set to: 0.0.0.0 For a static IP, specify the desired IP address you wish to assign to your PIN pad device.
#SUBNETMASK=XXX.XXX.XXX.XXX	Specify the subnet for your wireless network. If using DHCP, this address should be 0.0.0.0
#GATEWAY=XXX.XXX.XXX.XXX	Set the default gateway IP address of your wireless network. If using DHCP, this address should be 0.0.0.0
#DNSPRI=XXX.XXX.XXX.XXX	Set the IP address of the Primary DNS Server on your wireless network. If using DHCP, or if your network does not use DNS, this address should be 0.0.0.0

Parameter	Description
#DNSSEC=XXX.XXX.XXX.XXX	Set the IP address of the Secondary DNS Server on your wireless network. If using DHCP, or if your network does not use DNS, this address should be 0.0.0.0
#SSID="XXXX"	Enter the SSID of your wireless network; be sure to include the quotation marks as shown.

6. Update the wireless encryption settings. The user is responsible for following all PCI requirements dealing with wireless network setup and encryption, including changing encryption keys on a regular basis. Never use default passwords or encryption keys.
 - For additional information on PCI requirements, refer to the separate WinEPS Users PCI Recommendations Guide document as well as the latest PCI requirements (www.pcisecuritystandards.org).

The following SCAT670.DLD keywords are for wireless network encryption setup:

Encryption Parameter	Description
#WEPMODE=X	Set the mode to correspond to the encryption type used in your wireless network. 0 (no encryption) 1 (WEP 64 bit encryption) 2 (WEP 128 bit encryption) 3 (WPA Encryption) • PCI requires encryption be present, so the 0 (no encryption) option should never be used.
#WPAKEY	This setting is for WPA and is only used when WPA security is used instead of WEP. Enter the "WPA Key" or "Passphrase" defined in your wireless router.  <i>The Vx670 converts all lowercase text to uppercase for configuration settings, so the WPA Key must be entered in capital characters in both the SCAT670.DLD file and on the wireless router.</i> • Note that WPA is a newer standard than WEP and is considered to be more secure; however not all wireless devices support the use of WPA.
#WEPINDEX	This setting is for WEP and is only used when WEP security is used instead of WPA. Enter the "TX KEY" field defined in your Wireless router. Possible values are 1, 2, 3, or 4.
#WEPKEY1	This setting is for WEP and is only used when WEP security is used instead of WPA. Enter the 1st WEP key as defined in your wireless router. This is either a 10 character WEP key for 64 bit encryption or a 26 character WEP key for 128 bit encryption
#WEPKEY2	This setting is for WEP and is only used when WEP security is used instead of WPA. Enter the 2nd WEP key as defined in your wireless router. This is either a 10 character WEP key for 64 bit encryption or a 26 character WEP key for 128 bit encryption

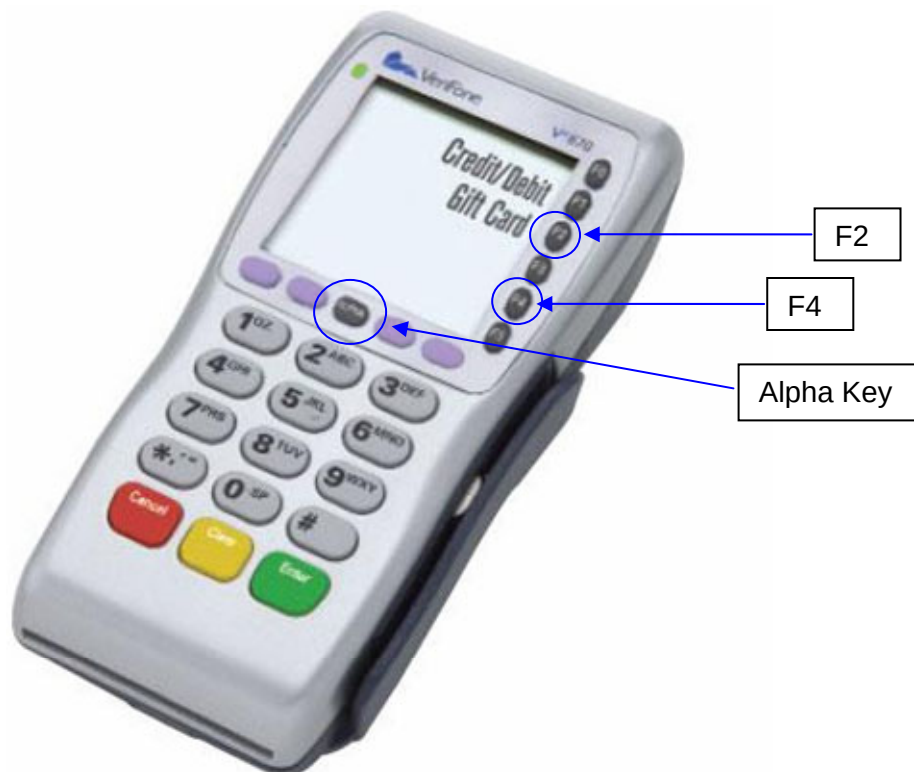
Encryption Parameter	Description
#WEPKEY3	This setting is for WEP and is only used when WEP security is used instead of WPA. Enter the 3rd WEP key as defined in your wireless router. This is either a 10 character WEP key for 64 bit encryption or a 26 character WEP key for 128 bit encryption
#WEPKEY4	This setting is for WEP and is only used when WEP security is used instead of WPA. Enter the 4th WEP key as defined in your wireless router. This is either a 10 character WEP key for 64 bit encryption or a 26 character WEP key for 128 bit encryption

- Once all modifications have been made to the 'SCAT670.DLD' file, save and close it.

Set Terminal to Download

To initialize the terminal and set it for download, follow these steps:

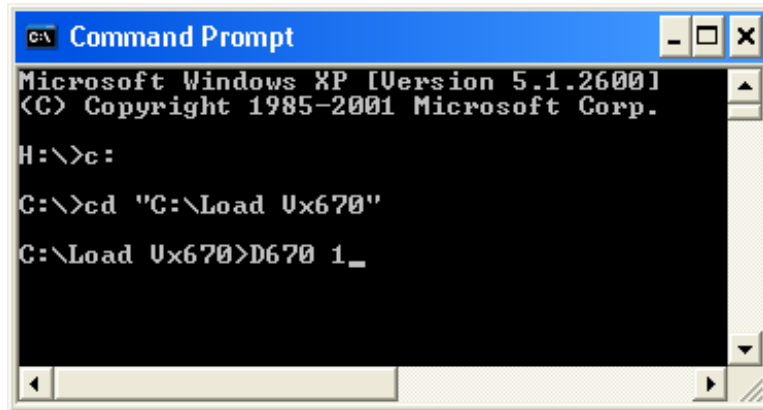
- Connect the Vx670 to an available com port using the VeriFone loading cable, P/N 23187-01-R REVA. Make sure the terminal is connected to the same computer that the SCAT code was unzipped to.
- On the Vx670 terminal, press the 'F2' and 'F4' keys simultaneously. When prompted for password, key in 1-alpha-alpha-6-6-8-3-1



- Select 'F1' for 'Download'.
- The screen will read "SYS MODE FILE FILE GROUP _1". Press the Enter key
- The PIN pad will ask for another password. Key in 1-alpha-alpha-6-6-8-3-1
- Select 'F3' for full, then 'F2' for COM1. The PIN pad is now ready for download

Run a Command Line Batch File

1. Using a command line, browse to the directory where the 670 SCAT code was unzipped.



```
C:\> Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

H:\>c:
C:\>cd "C:\Load Ux670"
C:\Load Ux670>D670 1_
```

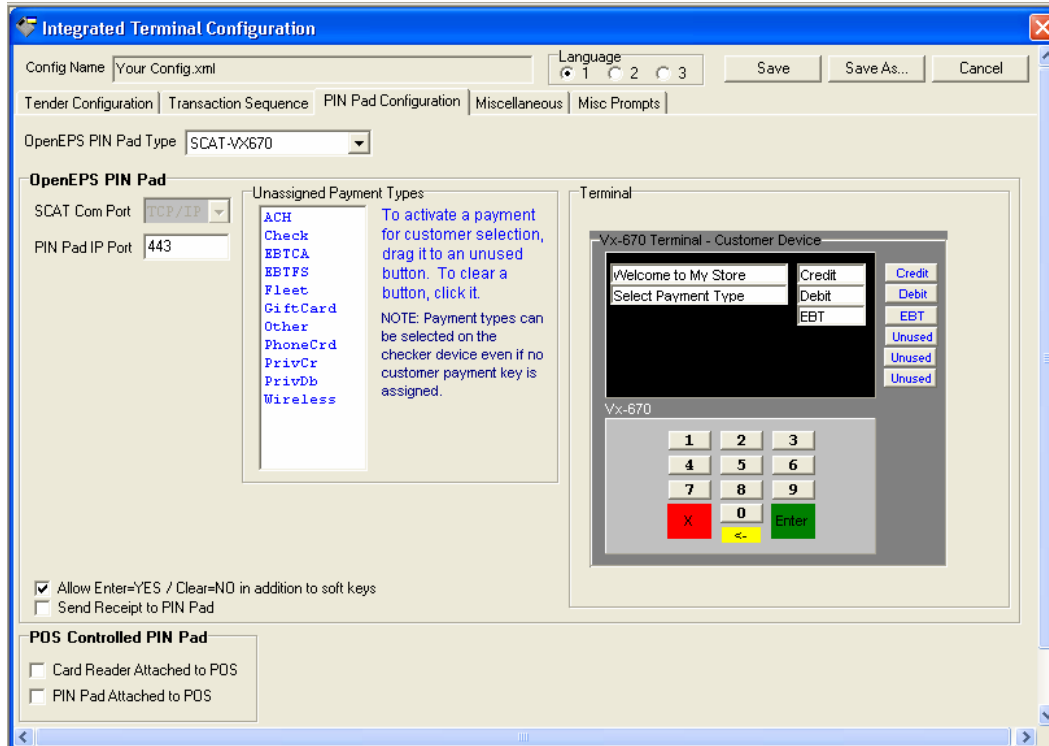
2. Type the following:
D670 X
Where X is the com port on which the Vx670 is connected to the PC.
3. The PIN pad will now load

Additional Information – VeriFone Vx670

Vx670 WinEPS Setup

The following information pertains to the configuration of the Vx670 terminal in WinEPS.

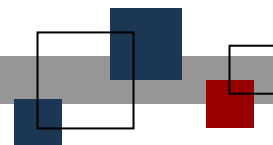
To get to the screen shown below, in WinEPS go to Configuration | Terminal Configuration > OpenEPS Lanes and select the configuration file you are using.



General information about this screen is located in the WinEPS user's Guide, Chapter 8, OpenEPS Lanes: PIN Pad Configuration Tab section.

Information specific to the Vx670 is detailed below.

Screen Item	Description
SCAT Com Port	This setting is not used with the Vx670.
PIN Pad ID Port	This is the port opened by OpenEPS on the POS computer to allow the wireless connection by supported wireless SCAT terminals such as the Vx670. This option is only displayed for terminals that utilize it.
Send Receipt to Pin Pad	This checkbox controls sending the receipt on from OpenEPS to a SCAT terminal with an attached or inbuilt printer. This option is only displayed for terminals that utilize it.



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