



-  *WinEPS Release Notes*
-  *Version 824 SP1*
- 
- 
- 



## WinEPS Release Notes

<b>Date of Issue</b>	<b>Product Identification Number</b>	<b>Part Number</b>	<b>Brief Description</b>
June 2005	45001/096	89000235	815.3 Preliminary
July 2005	45001/096	89000248	815.3 Final Release
October 2005	45001/096	89000261	815.3 SP1
April 2006	45001/096	89000303	817 SP2
June 2006	45001/096	89000310	818 SP1
July 2007	45001/096	89000388	821
August 2007	45001/096	89000389	822
August 2007	45001/096	89000390	823
November 2007	45001/096	89000407	823 SP1
January 2008	45001/096	89000414	823 SP2
March 2008	45001/096	89000430	824 SP1

**© Copyright StoreNext Retail Technologies LLC 1995-2008  
All rights reserved**

This publication is protected by federal copyright law. No part of this publication may be reproduced or transmitted into any human or computer language in any form or by any means, stored in a retrieval system, transmitted, redistributed, translated or disclosed to third parties, or de-compiled in any way including, but not limited to, photocopy, photograph, electronic, mechanical, magnetic or manual without the express written permission of StoreNext Retail Technologies LLC or its licensors, if any. This document, notwithstanding the above, may be distributed in electronic or printed form to personnel who are employed by either (1) a StoreNext customer of the subject system of this document or (2) personnel from an authorized StoreNext dealer of the subject system of this document. All copies, so distributed and/or so authorized, shall contain a full copy of this copyright notice.

StoreNext Retail Technologies LLC endeavors to ensure that the information in this document is correct and fairly stated but does not accept liability for any error or omission. StoreNext Retail Technologies LLC makes no representation or warranties with respect to the contents hereof, and specifically disclaims any implied warranties of merchantability or fitness for a particular purpose or non-infringement. No commitments by StoreNext or its suppliers are made from this documentation which is provided for information only.

Development of StoreNext products and documentation is continuous: StoreNext Retail Technologies LLC reserves the right to revise this publication and to make changes from time to time in the contents hereof or in the products herein described or discussed without notice and without any obligation of StoreNext Retail Technologies LLC to notify any person or organization of such revision or changes. Information published in this document will likely become obsolete over time and it is recommended that users regularly check for updates and newer versions.

StoreNext Retail Technologies LLC has prepared this manual for use by users, authorized third parties and personnel of StoreNext Retail Technologies LLC as a guide to the proper installation, operation, customization and/or maintenance of StoreNext Retail Technologies LLC equipment and software. The drawings and specifications contained herein are the property of StoreNext Retail Technologies LLC and/or its licensors.

Third-party products, services, or company names referenced in this document may be trademarked or copyrighted by their respective owners, and are for identification purposes only.

Copyrights, trademarks and license agreements shall be governed and construed in accordance with the laws of the State of Texas and the Federal Arbitration Act, and shall benefit Retailix, its successors, and assigns.

Address comments and corrections to:

**StoreNext Retail Technologies LLC**  
Software Program Director  
6100 Tennyson Parkway

# Table of Contents

<b>SECTION 1 .....</b>	<b>1</b>
<b>824 SP 1 Information.....</b>	<b>1</b>
<b>Minimum System Requirements.....</b>	<b>1</b>
Hardware Requirements for WinEPS and OpenEPS .....	1
Software Requirements for WinEPS.....	2
Software Requirements for OpenEPS (Front POS Lanes):.....	2
PCI Compliance and Operating Systems .....	2
Unsupported Systems .....	2
<b>Code Versions .....</b>	<b>3</b>
WinEPS Versions: .....	3
OpenEPS Versions:.....	3
Terminal Code Versions: .....	3
Stand Beside Code Versions:.....	3
<b>Known Issues .....</b>	<b>4</b>
Do not use 824.0 with IBM Integration .....	4
EOD Process Change.....	4
Engine will not start without a lane defined.....	4
<b>WinEPS Fixed Issues and Enhancements .....</b>	<b>5</b>
<b>OpenEPS Changes.....</b>	<b>12</b>
<b>OpenIP Changes.....</b>	<b>14</b>
<b>Host Changes .....</b>	<b>15</b>
ACI .....	15
Albertsons .....	16
Ascendent .....	16
BioPay.....	16
Chase.....	16
Concord: EPC .....	18
Concord: H&C Format .....	18
Concord: Memphis .....	19
Demo.....	19
ePic Tranz .....	20
GlobalPay .....	21
LML.....	22
Lynk.....	22
LX1 & LX2 (Check) Hosts.....	24
Mainsail .....	25
Mercury.....	25
MPS (Fifth Third).....	26
MTX Receipt Capture Host .....	26
NOVA.....	26
Paypoint .....	27
Pay by Touch .....	27
Shared (BigY).....	27
<b>Terminal Code Changes .....</b>	<b>28</b>
Hypercom ICE5500 .....	28
Hypercom ICE6000 .....	28
Hypercom L4100 .....	28
Hypercom L4250 .....	29
Ingenico eN-Crypt 2100 .....	29
Ingenico eN-Touch 1000 .....	29
Ingenico 6550 .....	29

IVI C2000 Protégé .....	29
NCR 5993 .....	30
Verifone Everest .....	30
Verifone MX830/MX850/MX870 .....	30
Verifone Omni 490 .....	31
Verifone Omni 7000 .....	31
VeriFone Vx670 .....	31
<b>Stand Beside Code Changes .....</b>	<b>32</b>
IVI C2000 Protégé .....	32
Verifone Everest .....	32
Verifone Omni 490 .....	32
Verifone Omni 3750 .....	32
<b>External Program Changes .....</b>	<b>33</b>
Engine Monitor and Tray Icon .....	33
Host Simulator .....	33
IBM Integration .....	33
OMNI 7000 Scanmaster Code .....	34
Redundancy Service .....	34
UpdateXMLFiles.Exe .....	34
Virtual Terminal 2 .....	34
<b>SECTION 2 .....</b>	<b>36</b>
<b>New Features .....</b>	<b>36</b>
<b>ConnectPay Tender .....</b>	<b>36</b>
New ConnectPay Tender for Concord H&C .....	36
POS Requirements .....	36
ConnectPay Setup .....	37
<b>UpdateXMLFiles.Exe .....</b>	<b>40</b>
XML Configuration File Update Program .....	40
Use Overview .....	40
UpdateXMLFiles GUI Screen .....	41
XML Loading dropdown & Button .....	41
XML Tag Tree .....	42
Expand & Collapse Buttons .....	43
XML Tag Tree Identifiers and Symbols .....	43
Properties Section .....	43
Actions List .....	44
Command Line Parameters .....	45

# Section 1

---

## 824 SP 1 Information

This section covers changes, bug fixes, and enhancements to the 824 SP 1 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.

### 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	824.0.1.168
EPSMenu.Exe	824.0.1.656
Rpt.Exe	824.0.0.10

### OpenEPS Versions:

Module	Version	Date
mtx_eps.dll	824.0.0.1080	3/3/2008
mtx_pos.dll	824.0.0.25	2/7/2008
libmtx_eps.so	824.0.0.1078	2/28/2008
libmtx_pos.so	823.0.0.22	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	47	10/18/2007
	HYP 4100	232	1/25/2007
	HYP L4250	232	1/25/2007
	ICE 5500	119	10/24/2007
	ICE 6000	119	10/24/2007
	Mx830/850/870	210U	6/29/2007
	NCR 5993	13	2/8/2007
	Omni 490	63	10/18/2007
	Omni 7000	49	10/18/2007
	VX670	16	2/27/2007

### 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	25	1/31/2008

## Known Issues

### **Do not use 824.0 with IBM Integration**

The 824 version of WinEPS contains enhancements that are not currently supported or compatible with IBM.

Do not use 824 version WinEPS or OpenEPS with the IBM Integration.

### **EOD Process Change**

The End of Day process for WinEPS has been modified: WinEPS no longer stops the service during the end of day procedure. Generally, this change will have little impact on in-store-procedures, however, changes to settings that affect the lanes will now wait to load until the lane signs on.

This procedure change is likely to only affect 24-hour stores that have just made a configuration change; to implement the changes, the lanes should be signed off then signed back on after the EOD completes.

For additional information on the End of Day changes, see [WinEPS Fixed Issues and Enhancements #24](#).

### **Engine will not start without a lane defined**

Due to the improvements in the WinEPS service, the engine will no longer start if no lanes are defined, since without lanes no transactions can be processed. The standard symptom of this is for the engine to appear to start and then immediately shut down on a new installation.

This will generally occur only on a fresh installation before WinEPS is fully configured.

## WinEPS Fixed Issues and Enhancements

Enhancement	Description
<p>1. Update GUI &amp; Reports to allow 8 digits for amounts</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The WinEPS GUI has been updated to allow the entry of up to 8 digits for amount fields. Previously these fields were limited to 7 digits in length.</li> <li>• The following fields have been affected: Card Processing profiles: <ul style="list-style-type: none"> <li>Maximum total amount (online and offline)</li> <li>Maximum cashback amount (online and offline)</li> <li>Minimum total amount</li> <li>Minimum cashback amount</li> <li>Minimum credit-to-debit amount (online and offline)</li> <li>Pre-auth amounts (online and offline)</li> </ul> Terminal Config: <ul style="list-style-type: none"> <li>Floor limit property of 'S' TAC:</li> </ul> </li> <li>• Reports have also been modified to allow the display of up to 8 digits.</li> <li>• The Update process for upgrading from previous versions of WinEPS will not change set amounts. If amounts need to be adjusted to take advantage of the new digit space, this must occur manually.</li> </ul>
<p>2. Prevent deletion of a card profile that is in use</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Individual card profiles can now only be deleted from a card processing profile XML file, if the prefix associated with the card profile is not in use. If attempted, a warning box will be displayed.</li> <li>• To delete a card profile, it is necessary to first go to the allowed card prefixes, and delete or disassociate any prefixes from the card code of the profile you want to delete.</li> </ul>
<p>3. New ConnectPay tender type</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Added a new ConnectPay tender type.</li> <li>• ConnectPay is a frequent shopper card program that is accepted as payment. The issued cards can be characterized as a type of debit card that is linked to the customers account.</li> <li>• ConnectPay is supported only by the Concord H&amp;C Host.</li> <li>• The ConnectPay tender type has a similar default TAC sequence to Debit, and requires PIN entry for processing. Manual ConnectPay transactions are not allowed.</li> <li>• ConnectPay transactions check both the new ConnectPay prefix table and the Debit BIN file; therefore, stores attempting to configure ConnectPay must use the Concord H&amp;C Debit BIN download, and Concord must be properly set up on the host side to place the proper ConnectPay prefixes into the Debit BIN file downloaded by the store.</li> <li>• <a href="#">Full details on this feature are included in Section 2.</a></li> </ul>

Enhancement	Description
<p>4. Add Dental, Medical and Vision, FSA Amounts</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The following new TACs and associated bits have been added to OpenEPS for improved FSA support: <ul style="list-style-type: none"> <li>q – FSA Dental Amount (Bit 104)</li> <li>o – FSA Medical Amount (Bit 105)</li> <li>Y – FSA Vision Amount (Bit 106)</li> </ul> </li> <li>• The following hosts have specifications that support the new amounts, but the new amounts have not yet been certified with the hosts: <ul style="list-style-type: none"> <li>Epic Tranz</li> <li>RBS Lynk</li> </ul> </li> <li>• The following Hosts have completed certification with these new FSA amounts: <ul style="list-style-type: none"> <li>ACI</li> <li>MPS 5/3</li> </ul> </li> </ul>
<p>5. Enhance Gift Card Balances at Pump</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• To present a unified method of returning Gift Card balances to fuel lanes after a pre-auth, WinEPS will now make certain to return the total value available on the gift card prior to the pre-authorization.</li> <li>• This means that if a pre-auth is processed to the host, the balance available will not have the pre-auth amount that was put 'on hold' deducted from it when the balance value is returned to the pump for display or printing.</li> <li>• The following hosts support gift card fuel transactions and have been updated to return the balance amount as stated above: <ul style="list-style-type: none"> <li>ACI</li> <li>Concord: EPC</li> <li>Concord: H&amp;C</li> <li>ePicTranz</li> <li>LX</li> </ul> </li> </ul>
<p>6. Add Exit buttons to WinEPS GUI screens</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Exit buttons have been added to the WinEPS GUI screens that did not already possess them.</li> </ul>

Enhancement	Description
<p>7. EBT Balance Inquiry customer display prompt update</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The way in which returned EBT balance values are displayed to the PIN pad on an EBT Balance Inquiry transaction has been updated. If the ~b 'keyword' is present in either line 1 or line 2 of the display text then the balance will display as  Line 1 = "Food Bal \$000.00"  Line 2 = "Cash Bal \$000.00"</li> <li>• The \$000.00 will display the actual dollar amount returned. If the host does not return a balance value, the amount will be replaced with "N/A". A zero dollar amount will be displayed if the balance returned is zero.</li> <li>• Concord Atlanta specifically had hard coded display methods; these have been updated to use the standardized terminal display methods described above.</li> </ul>
<p>8. Move Report Groups from the Card Processing Profile to the Report Selection screen</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The Reporting Groups feature has been moved from the Card Processing Profile screen, to its own tab on the Site Information   Report Selection screen.</li> <li>• The values for the report groups are universal and applied across all card processing profiles; the card codes and names displayed on this screen are derived from all of the files in the \EPS\config\cardprofiles\ directory.</li> </ul>
<p>9. New Terminal: Ingenico 6780</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• WinEPS now supports the Ingenico 6780 Terminal for use with OpenEPS integrated POS lanes.</li> <li>• This terminal is an OPOS terminal.</li> </ul>
<p>10. Stand in for FSA transactions only for FSA amount</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• If WinEPS is configured for Offline processing or Stand in at the POST for FSA transactions, when an offline FSA transaction is processed, it will only be approved for the FSA amount.</li> <li>• Previously, the whole submitted amount (FSA &amp; non-FSA) would have been approved. When an FSA amount is approved the POS will receive an AB approval code.</li> <li>• The POS may choose to resubmit the remaining non-FSA amount as a separate transaction, subject to the standard offline processing restrictions and settings.</li> </ul>

Enhancement	Description
11. New option to Remove Card Date from Actlog at EOD	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• A new checkbox option has been added to the Processing Options screen that will remove card information from actlog during the End of Day process.</li> <li>• The new option is called "Delete card holder sensitive data at EOD". When this option is checked, the card number and expiration date is truncated as part of the End of Day procedure.</li> <li>• After truncation, the card data is not retrievable by any WinEPS process or user. As such, a merchant indemnity agreement will appear and is required to activate this option.</li> </ul>
12. Revised status message counts	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The Status Message from OpenEPS has revised offline transaction counts that separates the financial transaction count from the non-financial (signature capture) count.</li> <li>• The Status screen has been enhanced to display Offlines, TOR's and Signatures as separate counts.</li> </ul>
13. Add Last Modified time to XML files	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• A "LastModified" time has been added to all the XML files that the GUI writes to. This indicator will show the last time the file was saved and can be used as a reference to determine when a newer file is available.</li> </ul>
14. Unable to delete data from IBM setting in Site Information	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• When data was deleted from the IBM settings on the Site Information, Other Tab, the GUI was not properly saving it, and the data was therefore not being deleted. The WinEPS GUI has been updated to properly save the information when it is updated or deleted.</li> </ul>
15. TOR Logic Change	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Current TOR logic will attempt to send a TOR up 999 times before deleting the TOR. However, TOR transactions are not accepted after an End of Day or over 24 hours after the initial transaction.</li> <li>• Therefore, TOR logic has been improved to review the time and date stamp of the TOR, and if the TOR is over 24 hours old it will be deleted instead of being sent on to the host.</li> </ul>
16. Update WIC lock prompts	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The default WIC card lock prompt text for new installations of WinEPS has been updated to "Card Problem, Return to Clinic."</li> </ul>

Enhancement	Description
17. Prefix.XML update for new Discover card entries	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Discover card prefixes have been updated to include the following: 352XXXXX 353XXXXX 354XXXXX 355XXXXX 356XXXXX 357XXXXX 358XXXXX</li> <li>• All of the new prefixes have a PAN length of 16 digits.</li> </ul>
18. FTP processes activated when download disabled	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• When set to not download files from WinEPS, or upload log files, OpenEPS still showed attempts to connect in the Jrnl file. This has been corrected so that OpenEPS will not attempt the download or upload when the setting to disable these are in use.</li> </ul>
19. Default all card types to Truncate PAN on receipt	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• For new installations of WinEPS, the default for PAN Truncation on receipts for all card types will be set to True. Previously only Credit, Debit and EBT tenders were set to not show the full account numbers on receipts.</li> </ul>
20. IBMFtpInfo.xml created when no info entered	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• The IBMFtpInfo.xml file was being created by WinEPS even when no data was entered into the IBM information section of the Site Information   Processing Options, Other Tab.</li> <li>• This has been corrected so that if no IP information for IBM is entered, the IBMFtpInfo.xml file will not be created. In addition if the IBM IP information is removed, the IBMFtpInfo.xml will also be deleted.</li> <li>• During an Upgrade of WinEPS, if the IBMFtpInfo.xml file does not have IP information in it, it will be deleted as unused.</li> </ul>
21. Host Modules error for Offline Forward checking to remove transaction only on last day	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• Offline transactions were only set to be deleted precisely on the date of expiration instead of checking at any time after the expiration date. This has been corrected so that offline transactions are checked for expiration, and are deleted if they have previously expired.</li> </ul>
22. Corrected Socket error bug	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• A GUI socket error was discovered that showed up when WinEPS attempted to shut down. The issue has been corrected.</li> </ul>

Enhancement	Description
<p>23. New SCAT code for the 490, Everest, ICE6000, ICE5500, VX670, and OMNI7000</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Added download support for IBM format to the Everest.</li> <li>• Added 9600 Baud Support to the Everest and Omni 7000.</li> <li>• Reassigned menu key definitions on the Everest and Omni 7000 to match the Vx670.</li> <li>• Fixed a bug that caused the KSN to be copied incorrectly for the external pinpad.</li> <li>• Added zip code entry type and fixed soft key assignments for Omni 490.</li> </ul>
<p>24. WinEPS Service no longer stops the service during EOD</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The WinEPS service/engine no longer shuts down during the End of Day process. Instead, WinEPS goes into an idle state where it performs all of the activities that it normally processes during End of Day, and then returns to an active state at the end.</li> <li>• This change was made to eliminate some of the issues arising from stopping and starting services, as well as to increase the speed and stability of the entire End of Day process.</li> <li>• The EOD process will still perform the standard steps of cutting over log files, archiving, printing reports, and sending settlement messages to the hosts.</li> <li>• As WinEPS no longer shuts down, POS lanes will not disconnect from WinEPS during the EOD. If a lane attempts to send a transaction during the EOD time, it will receive an NL decline, indicating the lane should attempt to take the transaction locally, if it is configured to do so.</li> <li>• Configuration changes made during the day will become available at the End of Day as normal; however, as the lanes no longer disconnect at the EOD, it is now required that the lane be signed off and signed back on to initiate download of any new configurations after an EOD.</li> <li>• As previous, the WinEPS engine may be manually stopped and restarted to make any configuration changes available immediately.</li> <li>• Receipt &amp; signature capture files are sent to the MTX host after the end of day completes. If a connection is not available at that time, WinEPS will attempt to resend the file at one hour increments.</li> <li>• During the End of Day, WinEPS will attempt to restore the primary connection for any host that is connected through the backup IP address; this process will cause the host to go down briefly until reconnection occurs.</li> </ul>
<p>25. Auto-logout from Card Processing Profile screen causing violation</p>	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• If the user had the WinEPS GUI open to the Card Processing Profiles screen when their session timed out due to inactivity, WinEPS would generate an Access Violation. This issue has been corrected.</li> </ul>

Enhancement	Description
26. Change default automatic start time to 11:15	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• For fresh installations of WinEPS the default end of day time has been updated to 23:15. This is because the cutover for the Proxy Client was occurring at the same time and causing delays in the reconnection routine.</li> </ul>
27. Add MTX_SE.UPD to Fversion.txt	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The MTX_SE.UPD has been added to the FVersion.Txt file for automatic download to the lane. This allows the MTX_SE.DLL file to be updated automatically when a new version is available.</li> </ul>
28. Engine shutdown socket error	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• An issue with receiving a socket error when the engine was shut down has been corrected.</li> </ul>
29. Corrected blank response code table	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• When accessing the Host Response Codes, the table was incorrectly blank due to an error in reading the configuration file.</li> </ul>

## OpenEPS Changes

Enhancement	Description
1. Pass manager ID	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Added the proper messaging to allow OpenEPS to send manager IDs to be passed along.</li> </ul>
2. Credit to Debit With Sig Under Sig Limit Creates No Receipt	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• When a credit to debit transaction is processed, a receipt is not required for the Debit transaction, but if it is converted back to credit, a receipt and signature slip must be printed. OpenEPS was not creating a receipt at all when a transaction was converted back to credit if it was under the processing option limit for signature capture.</li> <li>• This has been corrected so that a receipt is available even if a signature slip is not required.</li> </ul>
3. Add new Biometrics entry methods	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The following new entry methods have been added to the Biometrics interface: <ul style="list-style-type: none"> <li>8 digit date of birth</li> <li>6 digit date of birth</li> <li>last 4 digits of Social Security Number</li> <li>zip code</li> </ul> </li> <li>• These new calls will only function for the most recent version of the Pay by Touch client that is not currently in production.</li> <li>• When these entry methods are requested, the biometrics client may also provide display text. If text is not supplied by the client, default text will be drawn from the lane's configuration XML file.</li> </ul>
4. Tender Resolve Function	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• A new Tender Resolve Function has been added to OpenEPS. This function allows the POS to send OpenEPS a card number and OpenEPS will attempt to resolve the card number to a single card type.</li> <li>• If the resolution is successful, OpenEPS returns the Card Name and the 2 letter card code, otherwise it returns unknown.</li> <li>• The function is: MTX_POS_TenderResolve. Full details on the function can be found in the OpenEPS Specification.</li> </ul>

Enhancement	Description
5. Hashed Card Number Function call	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• A new function, MTX_POS_GET_PANHash, has been added to OpenEPS to allow the POS to receive a hashed value based off the card number for the card in use in the current transaction.</li> <li>• This function returns a 40 character hashed value derived from the payment card's personal account number (PAN).</li> <li>• The hashed value will be the same for the same card number, however there is a small chance that multiple card numbers may produce the same hashed value.</li> <li>• This strong one-way hash function is intended to meet the requirements for PCI DSS Section 3.4.</li> </ul>
6. OpenEPS use Receipt Header and footer from storeconfigurations.xml	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• OpenEPS has been updated to use the Receipt Header and Receipt Footer text that is in the storeconfigurations.xml file instead of receiving the data in the sign-on response message.</li> <li>• To support the Citrix environment integration, the storeconfigurations.xml file has been updated to allow multiple receipt text versions categorized by store number. If a store number is supplied to OpenEPS, then OpenEPS will use the receipt text associated with that store, or the default text if data for that store is not found.</li> </ul>
7. OpenEPS sets Lane Type in outgoing message	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• OpenEPS now supplies its own Lane Type setting instead of WinEPS looking up the setting from the lane list.</li> <li>• OpenEPS reads its lane type out of the Lane.XML file, taking the listing for the lane number it is signed on as. This value is then sent up as part of the transaction message.</li> </ul>
8. Purchase/balance inquiry screen being skipped	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• A bug existed where the purchase/balance inquiry screen was skipped on the terminal if the POS set the tender type. This has been corrected so that the customer will always have the opportunity to select purchase or balance inquiry when that TAC is configured for use.</li> </ul>
9. Autotender should not check DSProcPumpDefaultTender	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• During Autotender processing, OpenEPS was incorrectly checking for the default tender set for the Fuel lane tender resolve value. This was causing error lines to appear in the log file. OpenEPS has been corrected to no longer attempt to check this setting during Autotender resolution.</li> </ul>
10. Allow short Phone Card PAN	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• The latest OpenEPS allows the use of Phone Cards with a PAN length as short as 10 digits.</li> </ul>

## OpenIP Changes

Enhancement	Description
1. -No Change to OpenIP -	<ul style="list-style-type: none"><li data-bbox="570 457 641 485">• ---</li></ul>

# Host Changes

## ACI

Enhancement	Description
1. ACI SSL Host Connection	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The ACI host module has been enhanced to allow communication with the ACI switch using Secure Socket Layer (SSL).</li> <li>The option to use SSL will appear as a check box on the Host Configuration screen.</li> </ul>
2. Send POST Transaction Number to ACI	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The POST Transaction Number is now sent up to the ACI host for each transaction, when set by the POS.</li> <li>The POST Transaction Number is sent in bit 3-15 Token 74.</li> </ul>
3. Not allow Discover cash back only for ACI	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Discover is now performing chargebacks for transactions consisting of cash only for non-ATMs. WinEPS has been updated to automatically decline cash-only Discover card transactions for the ACI host.</li> </ul>
4. Enhance Gift Card Balances at Pump	<ul style="list-style-type: none"> <li>Enhancement</li> <li>To present a unified method of returning Gift Card balances to fuel lanes after a pre-auth, WinEPS will now make certain to return the total value available on the gift card prior to the pre-authorization.</li> <li>This means that if a pre-auth goes up, the balance available will not have the pre-auth amount that was put 'on hold' deducted from it when the balance value is returned to the pump for display or printing.</li> <li>The following hosts support gift card fuel transactions and have been updated to return the balance amount as stated above: <ul style="list-style-type: none"> <li>ACI</li> <li>Concord: EPC</li> <li>Concord: H&amp;C</li> <li>ePicTranz</li> <li>LX</li> </ul> </li> </ul>
5. Certified FSA	<ul style="list-style-type: none"> <li>Certification</li> <li>ACI has certified FSA transactions with 824, encompassing the original FSA Total and Rx amount fields as well as the new FSA fields for Dental Amount, Medical Amount, and Vision Amount.</li> </ul>

## Albertsons

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

## Ascendent

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

## BioPay

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

## Chase

Enhancement	Description
1. Add RFID support to Chase	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Support has been added for RFID to the Chase host. When OpenEPS detects that RFID was used for payment, then it will pass that information to WinEPS. WinEPS will send the required setting up to Chase in the Entry Data Source field.</li> <li>Chase has several Entry Data Source values that OpenEPS cannot support. Specifically Data Entry Source values of 33, 34, and 35 cannot be specified, as OpenEPS does not know if a reader is capable of RFID unless an RFID payment is actively being used.</li> <li>This has not yet been certified.</li> </ul>

Enhancement	Description
2. CHS: Need to indicate Swiped and RFID transaction on receipts	<ul style="list-style-type: none"><li>• Enhancement</li><li>• Indicators are now placed onto the OpenEPS receipt to display Manual (M), Swiped (S) or RFID (R) card read.</li></ul>
3. Gift Card No lesser amount reversal	<ul style="list-style-type: none"><li>• Fixed</li><li>• If the “Approved for Lesser Amount” option is not in use by the POS for Gift Card, a reversal will now be sent up for the approved amount instead of the original transaction amount.</li><li>•</li></ul>

## Concord: EPC

Enhancement	Description
1. Enhance Gift Card Balances at Pump	<ul style="list-style-type: none"> <li>Enhancement</li> <li>To present a unified method of returning Gift Card balances to fuel lanes after a pre-auth, WinEPS will now make certain to return the total value available on the gift card prior to the pre-authorization.</li> <li>This means that if a pre-auth goes up, the balance available will not have the pre-auth amount that was put 'on hold' deducted from it when the balance value is returned to the pump for display or printing.</li> <li>The following hosts support gift card fuel transactions and have been updated to return the balance amount as stated above: <ul style="list-style-type: none"> <li>ACI</li> <li>Concord: EPC</li> <li>Concord: H&amp;C</li> <li>ePicTranz</li> <li>LX</li> </ul> </li> </ul>

## Concord: H&C Format

Enhancement	Description																																				
1. Update Concord H&C response codes	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The following response codes have been added to the Concord H&amp;C response table: <table border="1" data-bbox="581 1102 1430 1558"> <tr> <td>C22</td> <td>ETC velocity referral exceeds chain daily amount</td> <td>NO</td> </tr> <tr> <td>C23</td> <td>ETC velocity referral exceeds chain daily both count and amount</td> <td>NO</td> </tr> <tr> <td>C24</td> <td>ETC velocity referral exceeds chain period count</td> <td>NO</td> </tr> <tr> <td>C25</td> <td>ETC velocity referral exceeds chain period amount</td> <td>NO</td> </tr> <tr> <td>E20</td> <td>Invalid Transaction Type</td> <td>ND</td> </tr> <tr> <td>E21</td> <td>Invalid Merchant</td> <td>ND</td> </tr> <tr> <td>E24</td> <td>Invalid Amount</td> <td>ND</td> </tr> <tr> <td>E27</td> <td>Unmatched Reversal</td> <td>ND</td> </tr> <tr> <td>E28</td> <td>Reversal Processing Error</td> <td>ND</td> </tr> <tr> <td>E29</td> <td>Transaction Already Reversed</td> <td>ND</td> </tr> <tr> <td>E30</td> <td>PIN not selected</td> <td>NP</td> </tr> <tr> <td>E31</td> <td>PIN tries exceeded</td> <td>ND</td> </tr> </table> </li> </ul>	C22	ETC velocity referral exceeds chain daily amount	NO	C23	ETC velocity referral exceeds chain daily both count and amount	NO	C24	ETC velocity referral exceeds chain period count	NO	C25	ETC velocity referral exceeds chain period amount	NO	E20	Invalid Transaction Type	ND	E21	Invalid Merchant	ND	E24	Invalid Amount	ND	E27	Unmatched Reversal	ND	E28	Reversal Processing Error	ND	E29	Transaction Already Reversed	ND	E30	PIN not selected	NP	E31	PIN tries exceeded	ND
C22	ETC velocity referral exceeds chain daily amount	NO																																			
C23	ETC velocity referral exceeds chain daily both count and amount	NO																																			
C24	ETC velocity referral exceeds chain period count	NO																																			
C25	ETC velocity referral exceeds chain period amount	NO																																			
E20	Invalid Transaction Type	ND																																			
E21	Invalid Merchant	ND																																			
E24	Invalid Amount	ND																																			
E27	Unmatched Reversal	ND																																			
E28	Reversal Processing Error	ND																																			
E29	Transaction Already Reversed	ND																																			
E30	PIN not selected	NP																																			
E31	PIN tries exceeded	ND																																			
2. Add PO number to Concord H&C message	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The Concord H&amp;C host module has been updated to add in the new PO Number field.</li> <li>This field is sent up in FID 'p'.</li> <li>If the PO number entered or set by the POS is zero, WinEPS will assume no PO number was set.</li> </ul>																																				

Enhancement	Description
3. New ConnectPay tender type	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Added a new ConnectPay tender type.</li> <li>• ConnectPay is a frequent shopper card program that is accepted as payment. The issued cards can be characterized as a type of debit card that is linked to the customers account.</li> <li>• ConnectPay is supported only by the Concord H&amp;C Host.</li> <li>• The ConnectPay tender type has a similar default TAC sequence to Debit, and requires PIN entry for processing. Manual ConnectPay transactions are not allowed.</li> <li>• ConnectPay transactions check both the new ConnectPay prefix table and the Debit BIN file; therefore, stores attempting to configure ConnectPay must use the Concord H&amp;C Debit BIN download, and Concord must be properly set up on the host side to place the proper ConnectPay prefixes into the Debit BIN file downloaded by the store.</li> <li>• <a href="#">Full details on this feature are included in Section 2.</a></li> </ul>
4. Certified FSA	<ul style="list-style-type: none"> <li>• Certification</li> <li>• Concord H&amp;C has certified FSA transactions with 823 WinEPS. This includes the original FSA Total and Rx amount fields.</li> <li>• This certification does not include the new FSA fields for Dental Amount, Medical Amount, and Vision Amount.</li> </ul>
5. TORs missing Track 2	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• Time Out Reversals for EBT transactions were missing track 2 information if a late response was received from the host. This latest module will populate the TOR with all card information in all circumstances.</li> </ul>

### Concord: Memphis

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

### Demo

Enhancement	Description
-------------	-------------

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

## ePic Tranz

Enhancement	Description
1. Enhance ePic Tranz	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The Epic Tranz host has been updated to add in the debit return amount bucket to the settlement message. Debit Return is also now included in the settlement report.</li> </ul>
2. Enhance Gift Card Balances at Pump	<ul style="list-style-type: none"> <li>Enhancement</li> <li>To present a unified method of returning Gift Card balances to fuel lanes after a pre-auth, WinEPS will now make certain to return the total value available on the gift card prior to the pre-authorization.</li> <li>This means that if a pre-auth goes up, the balance available will not have the pre-auth amount that was put 'on hold' deducted from it when the balance value is returned to the pump for display or printing.</li> <li>The following hosts support gift card fuel transactions and have been updated to return the balance amount as stated above: <ul style="list-style-type: none"> <li>ACI</li> <li>Concord: EPC</li> <li>Concord: H&amp;C</li> <li>ePicTranz</li> <li>LX</li> </ul> </li> </ul>
3. Update ECC Receipt text	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The Electronic Check Conversion receipt text has been updated. According to NACHA requirements the fee amount for returned check must be specified exactly.</li> <li>Both the standard text for fresh installs of WinEPS and the default text for an absent ECCRecInfo.XML file have been updated.</li> </ul>

Enhancement	Description												
4. Added response codes	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The following response codes have been added to the ePic Tranz host: <table border="0" data-bbox="662 344 1081 443"> <tr> <td>56</td> <td>Exceeded Max PIN Tries</td> <td>ND</td> </tr> <tr> <td>92</td> <td>Issuer Unavailable</td> <td>ND</td> </tr> <tr> <td>93</td> <td>Issuer Unavailable</td> <td>ND</td> </tr> </table> </li> <li>• Additional response codes have been added to the default TRN response codes tables. <table border="0" data-bbox="662 541 1065 640"> <tr> <td>ResponseCodesTRN.XML</td> </tr> <tr> <td>ResponseCodesEPS.XML</td> </tr> <tr> <td>ResponseCodesTRN_OpenEPS.XML</td> </tr> </table> </li> </ul>	56	Exceeded Max PIN Tries	ND	92	Issuer Unavailable	ND	93	Issuer Unavailable	ND	ResponseCodesTRN.XML	ResponseCodesEPS.XML	ResponseCodesTRN_OpenEPS.XML
56	Exceeded Max PIN Tries	ND											
92	Issuer Unavailable	ND											
93	Issuer Unavailable	ND											
ResponseCodesTRN.XML													
ResponseCodesEPS.XML													
ResponseCodesTRN_OpenEPS.XML													

## GlobalPay

Enhancement	Description
1. Host Removed	<ul style="list-style-type: none"> <li>• This host is no longer supported</li> </ul>

## LML

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

## Lynk

Enhancement	Description
1. Added FSA support	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The Lynk host module has been updated to support FSA, including the new Dental, Medical and Vision Amounts</li> <li>No certification has been completed at this time.</li> </ul>
2. New Supported Features	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Added support for the following to the Lynk host: <ul style="list-style-type: none"> <li>FSA</li> <li>Partial Approval</li> <li>Black Hawk Gift Cards (Activation &amp; Void of Activation Only)</li> </ul> </li> <li>A new field called "Store Number" has been added to the Lynk host screen; this field value is sent up to the host in fid B bytes 1-4 during Blackhawk activations.</li> <li>Certification is in progress, but has not yet been completed.</li> </ul>
3. Add PO Number, Zip code and Tax Amount	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The following fields have been added to the RBSLynk Interface: <ul style="list-style-type: none"> <li>PO Number</li> <li>Zip Code</li> <li>Tax Amount</li> </ul> </li> <li>These fields are populated from the data returned by the POS when processing the corresponding TACs.</li> </ul>
4. Support Debit BIN Update	<ul style="list-style-type: none"> <li>Enhancement</li> <li>BIN file update is now supported through the LYNK host. During the End of Day procedure, WinEPS will search of the DebitBIN.txt file in the EPS directory, and if found, convert it into the DebitBIN.eft WinEPS format.</li> <li>For Credit to Debit Conversion to function, the Debit BIN file must be placed into the EPS directory. It is not an automatic process to get the Debit Bin file at this time.</li> </ul>

Enhancement	Description																																																																																																								
<p>5. Option to require Freq Shopper # for Offline Debit</p>	<ul style="list-style-type: none"> <li>Enhancement</li> <li>A new checkbox has been added to the LYNK host screen: “Frequent Shopper Number Required for Offline Debit”</li> <li>When checked, a frequent shopper number is required for any offline debit transaction. If the frequent shopper number is not supplied the transaction will be declined.</li> </ul>																																																																																																								
<p>6. Support Resubmittal Logic</p>	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The following response codes from Lynk will cause WinEPS to attempt to stand in and resubmit the transaction later:</li> </ul> <table border="1" data-bbox="581 642 1214 1829"> <thead> <tr> <th>Tender</th> <th>RBS Lynk Response</th> <th>Code</th> <th>Resubmit Time</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>090 Format Error – contact RBS Lynk DENIED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>All</td> <td>091 Data Error – contact RBS Lynk DENIED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>All</td> <td>092 Setup Error –contact RBS Lynk DENIED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1010 Invalid Merchant Number or Check Digit TERM ID ERROR</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1011 Invalid Terminal Number INV TERM NO</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1012 Invalid Terminal Type INV TERM TYPE</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1013 Terminal Deactivated CALL LYNK</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1014 Invalid Tran Code INV TRAN CODE</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1027 Invalid AMEX Setup AMEX NOT ALLOWED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1028 Invalid Discover Setup DISC NOT ALLOWED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1029 Invalid Diner/Carte Blanche Card Setup DCCB NOT ALLOWED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1030 Invalid JCB Setup JCB NOT ALLOWED</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Debit</td> <td>0015 Bank Not Available BANK NOT AVAIL</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Debit</td> <td>0032 Network Unavailable NETWORK UNAVAIL</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Debit</td> <td>0090 Invalid Terminal Type - Call Lynk INV TERM TYPE</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Debit</td> <td>0091 Invalid Terminal ID - Call Lynk INV TERM ID</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Debit</td> <td>0093 Terminal Deactivated - Call Lynk CALL LYNK</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Debit</td> <td>0099 Invalid Terminal INV TERMINAL</td> <td>1</td> <td>Retry every 4 Hrs 14 days (System Issue)</td> </tr> <tr> <td>Credit</td> <td>1099 Invalid Data Format In Request DATA FORMAT ERR</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> <tr> <td>Debit</td> <td>0094 Format Error In Transaction Request - Call Lynk DATA FORMAT ERR</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> <tr> <td>Gift</td> <td>0012 Processing Error CANNOT PROCESS</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> <tr> <td>Gift</td> <td>0014 Unknown Message DATA FORMAT ERR</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> <tr> <td>Gift</td> <td>0015 Network Unavailable NETWORK UNAVAIL</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> <tr> <td>Gift</td> <td>0017 Activation amount is less than set Minimum ACT BELOW LIMIT</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> <tr> <td>Gift</td> <td>0074 Authorizer Routing Error DENIED</td> <td>2</td> <td>Retry 1 time a day for 14 Days (Issue)</td> </tr> </tbody> </table>	Tender	RBS Lynk Response	Code	Resubmit Time	All	090 Format Error – contact RBS Lynk DENIED	1	Retry every 4 Hrs 14 days (System Issue)	All	091 Data Error – contact RBS Lynk DENIED	1	Retry every 4 Hrs 14 days (System Issue)	All	092 Setup Error –contact RBS Lynk DENIED	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1010 Invalid Merchant Number or Check Digit TERM ID ERROR	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1011 Invalid Terminal Number INV TERM NO	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1012 Invalid Terminal Type INV TERM TYPE	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1013 Terminal Deactivated CALL LYNK	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1014 Invalid Tran Code INV TRAN CODE	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1027 Invalid AMEX Setup AMEX NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1028 Invalid Discover Setup DISC NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1029 Invalid Diner/Carte Blanche Card Setup DCCB NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1030 Invalid JCB Setup JCB NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)	Debit	0015 Bank Not Available BANK NOT AVAIL	1	Retry every 4 Hrs 14 days (System Issue)	Debit	0032 Network Unavailable NETWORK UNAVAIL	1	Retry every 4 Hrs 14 days (System Issue)	Debit	0090 Invalid Terminal Type - Call Lynk INV TERM TYPE	1	Retry every 4 Hrs 14 days (System Issue)	Debit	0091 Invalid Terminal ID - Call Lynk INV TERM ID	1	Retry every 4 Hrs 14 days (System Issue)	Debit	0093 Terminal Deactivated - Call Lynk CALL LYNK	1	Retry every 4 Hrs 14 days (System Issue)	Debit	0099 Invalid Terminal INV TERMINAL	1	Retry every 4 Hrs 14 days (System Issue)	Credit	1099 Invalid Data Format In Request DATA FORMAT ERR	2	Retry 1 time a day for 14 Days (Issue)	Debit	0094 Format Error In Transaction Request - Call Lynk DATA FORMAT ERR	2	Retry 1 time a day for 14 Days (Issue)	Gift	0012 Processing Error CANNOT PROCESS	2	Retry 1 time a day for 14 Days (Issue)	Gift	0014 Unknown Message DATA FORMAT ERR	2	Retry 1 time a day for 14 Days (Issue)	Gift	0015 Network Unavailable NETWORK UNAVAIL	2	Retry 1 time a day for 14 Days (Issue)	Gift	0017 Activation amount is less than set Minimum ACT BELOW LIMIT	2	Retry 1 time a day for 14 Days (Issue)	Gift	0074 Authorizer Routing Error DENIED	2	Retry 1 time a day for 14 Days (Issue)
Tender	RBS Lynk Response	Code	Resubmit Time																																																																																																						
All	090 Format Error – contact RBS Lynk DENIED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
All	091 Data Error – contact RBS Lynk DENIED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
All	092 Setup Error –contact RBS Lynk DENIED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1010 Invalid Merchant Number or Check Digit TERM ID ERROR	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1011 Invalid Terminal Number INV TERM NO	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1012 Invalid Terminal Type INV TERM TYPE	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1013 Terminal Deactivated CALL LYNK	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1014 Invalid Tran Code INV TRAN CODE	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1027 Invalid AMEX Setup AMEX NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1028 Invalid Discover Setup DISC NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1029 Invalid Diner/Carte Blanche Card Setup DCCB NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1030 Invalid JCB Setup JCB NOT ALLOWED	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Debit	0015 Bank Not Available BANK NOT AVAIL	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Debit	0032 Network Unavailable NETWORK UNAVAIL	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Debit	0090 Invalid Terminal Type - Call Lynk INV TERM TYPE	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Debit	0091 Invalid Terminal ID - Call Lynk INV TERM ID	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Debit	0093 Terminal Deactivated - Call Lynk CALL LYNK	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Debit	0099 Invalid Terminal INV TERMINAL	1	Retry every 4 Hrs 14 days (System Issue)																																																																																																						
Credit	1099 Invalid Data Format In Request DATA FORMAT ERR	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						
Debit	0094 Format Error In Transaction Request - Call Lynk DATA FORMAT ERR	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						
Gift	0012 Processing Error CANNOT PROCESS	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						
Gift	0014 Unknown Message DATA FORMAT ERR	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						
Gift	0015 Network Unavailable NETWORK UNAVAIL	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						
Gift	0017 Activation amount is less than set Minimum ACT BELOW LIMIT	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						
Gift	0074 Authorizer Routing Error DENIED	2	Retry 1 time a day for 14 Days (Issue)																																																																																																						

Enhancement	Description
7. Corrected offline timing issue	<ul style="list-style-type: none"> <li>Fixed</li> <li>Corrected an issue when doing offline transaction where the resubmit date was set for 4 hours regardless of the configuration in the Host Processor Definition.</li> </ul>
8. Lanes 12 to 43 error	<ul style="list-style-type: none"> <li>Fixed</li> <li>There was a problem discovered when using lanes 12-43 to the Lynk host; the message returning from the host was not being recognized which would cause transactions from these lanes to time out. This has been updated to properly process transactions from lanes 12-43 so the full range of lanes is now available to Lynk: 1-93.</li> </ul>
9. Corrected mismatched training sequence numbers	<ul style="list-style-type: none"> <li>Fixed</li> <li>Corrected an issue where the sequence numbers would become mismatched when sending training transactions through the Lynk host</li> </ul>
10. Health message timer	<ul style="list-style-type: none"> <li>Fixed</li> <li>An issue existed with the health timer logic and functionality. Under most circumstances, health messages were not being sent by WinEPS regardless of the setting in the host processor definition. This has been corrected so that the health messages will follow the configured timer.</li> </ul>

## LX1 & LX2 (Check) Hosts

Enhancement	Description
1. Add Request code 92 to EOD message	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Reqcode 92 for EBT Voucher Returns has been added to the End of Day message to the LX host.</li> </ul>
2. Send Pre-Auth & Completion same slot	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Fuel pay-at-the-pump completion request transactions are now sent up on the same slot number used for the initial pre-authorization.</li> <li>No other transaction will be sent on a slot after a pre-authorization has occurred until a completion or reversal is sent.</li> </ul>
3. Send zero dollar completions as Reversals DB & CR	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The LX host does not support fuel completion transactions for zero dollars; therefore, WinEPS has been enhanced so that all completions for zero dollars are instead converted to reversals of the pre-auth, and sent out on the same slot as the pre-auth to the LX host.</li> </ul>

Enhancement	Description
4. Enhance Gift Card Balances at Pump	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• To present a unified method of returning Gift Card balances to fuel lanes after a pre-auth, WinEPS will now make certain to return the total value available on the gift card prior to the pre-authorization.</li> <li>• This means that if a pre-auth goes up, the balance available will not have the pre-auth amount that was put 'on hold' deducted from it when the balance value is returned to the pump for display or printing.</li> <li>• The following hosts support gift card fuel transactions and have been updated to return the balance amount as stated above: <ul style="list-style-type: none"> <li>ACI</li> <li>Concord: EPC</li> <li>Concord: H&amp;C</li> <li>ePicTranz</li> <li>LX</li> </ul> </li> </ul>
5. 3 digit lane number	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• The three digit lane number supplied by the lanes was not being truncated properly for all transactions. This issue has been resolved.</li> <li>• When a lane number is submitted that is longer than 2 digits, WinEPS truncates the number, keeping the right-most 2 digits.</li> </ul>

## Mainsail

Enhancement	Description
1. Mainsail message logging	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• The messages to and from the Mainsail host were not being logged to the spool file. The latest module now logs all of the messages to and from the host.</li> </ul>

## Mercury

Enhancement	Description
1. Support offline for no host communication	<ul style="list-style-type: none"> <li>•</li> <li>• The Mercury host uses an ActiveX local component to provide communication between WinEPS and the host. When IP connection between the ActiveX control and the host is disrupted the ActiveX control sends back a local error to WinEPS for all transactions submitted during the down time.</li> <li>• The Mercury host module has been updated to read the returned error and to attempt to take the transaction locally (if configured) the same way that it would at any time that loses host communication.</li> </ul>

## MPS (Fifth Third)

Enhancement	Description
1. Added FSA support	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The MPS host module has been updated to support FSA, including the new Dental, Medical and Vision Amounts</li> <li>No certification has been completed at this time.</li> </ul>
2. Optional Health Message to MPS	<ul style="list-style-type: none"> <li>Enhancement</li> <li>A new checkbox on the MPS host screen is available for sending health messages to the MPS host.</li> <li>When checked, WinEPS will send out an 800echo request message to the host on a periodic basis.</li> <li>A minor error was fixed with the health message where the bitmap was incorrectly being set with a value of '80' instead of '02'.</li> </ul>
3. FSA Check Auth	<ul style="list-style-type: none"> <li>Fixed</li> <li>Partial check authorization amounts for FSA transactions were not being read correctly by WinEPS; the full amount of the transaction was being used instead of the partial approval. This module correctly reads the partially approved amount as it is returned from MPS.</li> </ul>
4. Credit to Debit Floor Limit issue	<ul style="list-style-type: none"> <li>Fixed</li> <li>On a successful Credit to Debit transaction that was sent to the host, but timed out due to no host replay, if the transaction was under the Credit to Debit floor limit the transaction was marked as receiving an online approval. This has been corrected so that standard offline logic will apply.</li> </ul>

## MTX Receipt Capture Host

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

## NOVA

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

## Paypoint

Enhancement	Description
2. -No Change to Host -	<ul style="list-style-type: none"> <li>• ---</li> </ul>

## Pay by Touch

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

## Shared (BigY)

Enhancement	Description
1. Add Debit Frequent Shopper option to BigY host screen	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• A new option has been added to the BigY host screen to turn on a requirement for frequent shopper data for offline or stand in debit transactions.</li> <li>• When an offline transaction is processed, if the check box is turned on, then a frequent shopper number will be necessary to complete the transaction.</li> <li>• OpenEPS will read the storeconfigurations.xml file to determine if this requirement is turned on or off.</li> </ul>

## Terminal Code Changes

### Hypercom ICE5500

Enhancement	Description
<p>1. New SCAT code for the 490, Everest, ICE6000, ICE5500, VX670, and OMNI7000</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Added download support for IBM format to the Everest.</li> <li>• Added 9600 Baud Support to the Everest and Omni 7000.</li> <li>• Reassigned menu key definitions on the Everest and Omni 7000 to match the Vx670.</li> <li>• Fixed a bug that caused the KSN to be copied incorrectly for the external pinpad.</li> <li>• Added zip code entry type and fixed soft key assignments for C2000 and Omni 490.</li> </ul>

### Hypercom ICE6000

Enhancement	Description
<p>1. New SCAT code for the 490, Everest, ICE6000, ICE5500, VX670, and OMNI7000</p>	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Added download support for IBM format to the Everest.</li> <li>• Added 9600 Baud Support to the Everest and Omni 7000.</li> <li>• Reassigned menu key definitions on the Everest and Omni 7000 to match the Vx670.</li> <li>• Fixed a bug that caused the KSN to be copied incorrectly for the external pinpad.</li> <li>• Added zip code entry type and fixed soft key assignments for C2000 and Omni 490.</li> </ul>

### Hypercom L4100

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

## Hypercom L4250

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

## Ingenico eN-Crypt 2100

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

## Ingenico eN-Touch 1000

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

## Ingenico 6550

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

## IVI C2000 Protégé

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

## NCR 5993

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

## Verifone Everest

Enhancement	Description
1. New SCAT code for the 490, Everest, ICE6000, ICE5500, VX670, and OMNI7000	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Added download support for IBM format to the Everest.</li> <li>Added 9600 Baud Support to the Everest and Omni 7000.</li> <li>Reassigned menu key definitions on the Everest and Omni 7000 to match the Vx670.</li> <li>Fixed a bug that caused the KSN to be copied incorrectly for the external pinpad.</li> <li>Added zip code entry type and fixed soft key assignments for C2000 and Omni 490.</li> </ul>

## Verifone MX830/MX850/MX870

Enhancement	Description
1. Scrolling receipts	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The terminal code for the MX800 series terminals has been enhanced to support scrolling receipts.</li> <li>To use scrolling receipts, the POS must specifically support the scrolling Receipt feature and must set the text display lines to be shown on the terminal.</li> </ul>
2. Support SmartWIC on Mx800 terminals	<ul style="list-style-type: none"> <li>Enhancement</li> <li>SmartWIC is now supported for the MX800 terminals.</li> <li>No certification has been completed at this time.</li> <li>SmartWIC code for the terminals is included on the 824 WinEPS installation CD. For loading instructions contact MTX Support.</li> </ul>

Enhancement	Description
3. Support KP200 with Mx870 Terminal	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The default flag for the KP200 in the fmagent.sys file has been changed from KP200=0 to KP200=1. This will alter the display of the PIN entry screen to make the Mx870 terminal compatible with the KP200 overlay.</li> </ul>

### Verifone Omni 490

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

### Verifone Omni 7000

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

### VeriFone Vx670

Enhancement	Description
1. Automate adding VX670 SCAT to FVersion.Txt	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• The VX670 SCAT code is now automatically added to the FVersion.Txt file in the same way that the SB3700 code is.</li> <li>• When WinEPS starts, the EPS directory will be searched for the most recent version of the VX670 SCAT code, and that file name will be added to the FVersion.Txt while older file version names will be deleted.</li> </ul>
2. Updated Version 16 SCAT code	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• During the partial tender of a gift card, when the POS requested the prompt for remaining balance, the terminal would fail to clear the message that was currently displaying.</li> </ul>

## Stand Beside Code Changes

### IVI C2000 Protégé

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

### Verifone Everest

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

### Verifone Omni 490

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

### Verifone Omni 3750

Enhancement	Description
1. 3750 code version 0025 Corrected 3750 parameter load error	<ul style="list-style-type: none"> <li>Fixed</li> <li>The latest Omni 3750 Terminal Code corrects and issue where the terminal would receive configuration errors when multiple parameter loads were requested.</li> </ul>
2. Omni 3750 tender error	<ul style="list-style-type: none"> <li>Fixed</li> <li>Latest 3750 Terminal code removes an issue where a tender was selected on the screen, but "Error: No Tender" would e displayed on the screen, and the terminal would return to the tender prompt.</li> </ul>

## External Program Changes

### Engine Monitor and Tray Icon

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

### Host Simulator

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

### IBM Integration

Enhancement	Description
1. 824 Version of WinEPS not for IBM	<ul style="list-style-type: none"> <li>Notice</li> <li>The 824 version of WinEPS contains enhancements that are not currently supported or compatible with IBM.</li> <li>Do not use 824 WinEPS with the IBM Integration.</li> </ul>

## 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 -	<ul style="list-style-type: none"> <li>---</li> </ul>

## Redundancy Service

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

## UpdateXMLFiles.Exe

Enhancement	Description
1. UpdateXMLFiles.Exe created to modify XML configuration files	<ul style="list-style-type: none"> <li>Enhancement</li> <li>The previous version of UpdateFiles.Exe was no longer compatible with the new XML file format that the configuration files have been transitioned into over the past several releases. The previous version of UpdateFiles.Exe is discontinued.</li> <li>A new UpdateXMLFiles.Exe has been created to modify the latest WinEPS XML files. See the UpdateXMLFiles.Exe guide for complete information on using the new version.</li> <li><a href="#">Full details on this feature are included in Section 2.</a></li> </ul>

## Virtual Terminal 2

Enhancement	Description
1. Do not require Check Type Prompt	<ul style="list-style-type: none"> <li>Enhancement</li> <li>Virtual Terminal has been enhanced to allow the optional specification of a default check type to use for all check transactions. The check type selected will be used for all check transactions processed through that Virtual Terminal lane.</li> <li>If the check type configuration is not used, VT will prompt the user for check types for each check transaction as it previously did.</li> </ul>

Enhancement	Description
2. VT2: Deleting a char from amount moves the decimal place	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• Virtual Terminal had a bug in the amount entry screen that resulted in the decimal point shifting if the delete key was used to erase an incorrectly entered amount. The decimal place is now fixed in place.</li> </ul>
3. VT Issue When ERC=1	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• Virtual Terminal was incorrectly handling an ERCRequired setting of 1. A setting of 1 indicates that only receipt capture (without signature) is required, so VT should not attempt to acquire any signature information.</li> </ul>
4. Virtual Terminal supports ConnectPay tender	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Virtual Terminal has been updated to support the use of the new ConnectPay tender type.</li> <li>• <a href="#">Full details on ConnectPay are included in Section 2.</a></li> </ul>
5. VT2 supports new FSA TACs	<ul style="list-style-type: none"> <li>• Enhancement</li> <li>• Virtual Terminal has been updated to support the FSA Medical, FSA Dental, and FSA Vision TACs.</li> <li>• When placed into the Transaction Sequence, Virtual Terminal will prompt for the FSA amounts one at a time.</li> </ul>
6. Printer configuration	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• Virtual Terminal has been updated to correct an issue with the printer configuration setting; previously the selected printer setting should be lost and would revert back to the default printer. This has been corrected so that the printer setting is now retained.</li> </ul>

# Section 2

---

## New Features

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

#### ConnectPay Tender

##### **New ConnectPay Tender for Concord H&C**

ConnectPay is a frequent shopper card program that is accepted as payment. The issued cards can be characterized as a type of debit card that is linked to the customers account.

ConnectPay is supported only by the Concord H&C Host.

The ConnectPay tender type has a similar default TAC sequence to Debit, and requires PIN entry for processing. Manual ConnectPay transactions are not allowed.

ConnectPay transactions check both the new ConnectPay prefix table and the Debit BIN file; therefore, stores attempting to configure ConnectPay must use the Concord H&C Debit BIN download, and Concord must be properly set up on the host side to place the proper ConnectPay prefixes into the Debit BIN file downloaded by the store.

There are two types of ConnectPay cards. The new cards are frequent shopper cards with a magnetic stripe which may be read normally by the terminal. These cards have a PAN length of 19 digits and begin with a prefix of 1639635 which is already included in the WinEPS default settings for the ConnectPay tender.

Previously issued frequent shopper cards with a barcode are also supported by way of the POS scanning the barcode and setting that barcode to OpenEPS as the PAN, along with setting the ConnectPay tender. These barcodes are 11 or 12 digits, and when set to OpenEPS, have the default prefix pre-pended to them so they will process the same way as slid cards.

##### **POS Requirements**

As ConnectPay is a new tender, to use it, the POS system must be specifically coded. POS systems must properly set the ConnectPay tender type when using the barcode scanned frequent shopper cards, and set the frequent shopper card to OpenEPS as the PAN.

Additional details for POS support of ConnectPay are located in the OpenEPS Specification

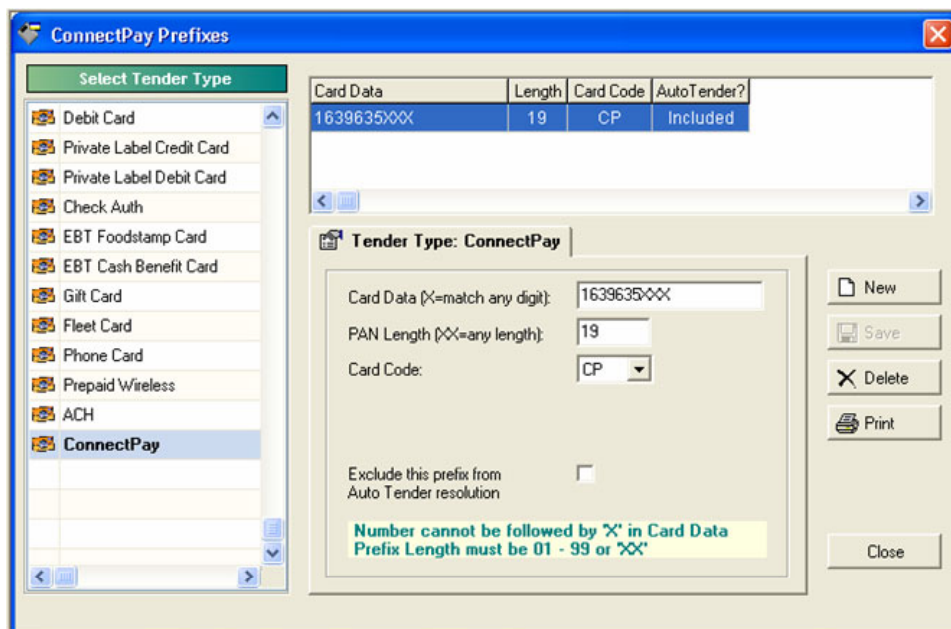
As of this publication, no POS system supports ConnectPay. Virtual Terminal supports swiped ConnectPay only.

### ConnectPay Setup

ConnectPay has default settings already present in the Card Prefixes and Card Processing Profile. The Concord Host Screen also has a ConnectPay Prefix setting.

Before running ConnectPay, verify the settings are correct:

1. Go to Configuration | Allowable Card Prefixes
2. Verify that the desired prefix for the ConnectPay cards is present. The Default Prefix is:  
Prefix: 1639635  
Pan Length: XX  
Card Code: CP

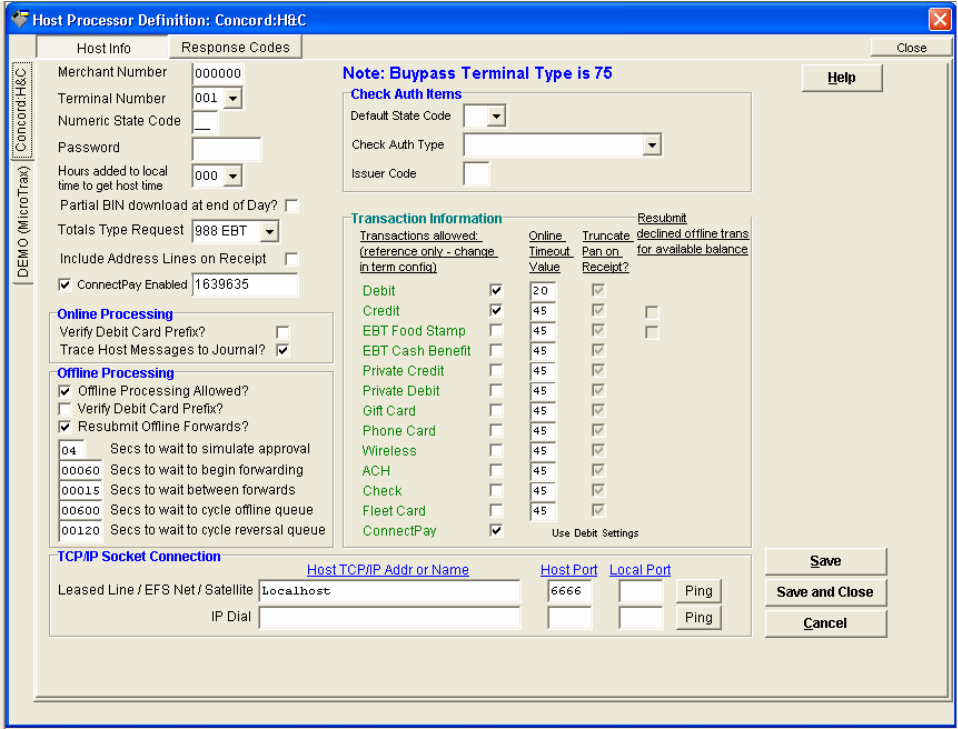


3. Next, go to Configuration | Card Processing Profiles.
4. Select CP ConnectPay from the left hand card list.
5. The default settings are shown below.

The screenshot shows the 'Card Processing Profiles' configuration window. The 'Select Card Code' list on the left includes codes like AC, AX, CK, CP, DB, DS, EC, EF, GC, HB, MC, MF, MP, PD, PH, PW, VF, VS, VY, and WX. The 'CP ConnectPay' profile is selected. The configuration details for 'CardProcessingProfile.xml' are as follows:

- Code:** CP
- Name:** ConnectPay
- Fleet Type:** None
- Processing Flags:**
  - Manual Entry Allowed
  - Prompt For Zip Code
  - Prompt For CVV2
  - Verify Acct# Check Digit
  - PIN Required
  - Print customer name on receipt (if available)
  - Allow Cash Back
    - Not Allow on Manual Entry
  - Expiration Date Required
  - Verify Exp Date Online
  - Verify Exp Date Offline
- Local Auth Flags:**
  - Allow local auth?
    - Purchase
    - Return
    - Force
    - PreAuth
    - Activate
  - Allow local void?
    - Purchase
    - Return
    - Force
    - AuthCompl.
    - Activate
- Online Auth Limits (in cents):**
  - Maximum Total Amount: 99999999
  - Maximum Cashback Amount: 5000
  - Minimum Total Amount: 0
  - Minimum Cashback Amount: 0
  - Minimum Credit-to-Debit Amount: 99999999
- Offline Auth Limits (in cents):**
  - Maximum Total Amount: 20000
  - Maximum Cashback Amount: 5000
  - Minimum Credit-to-Debit Amount: 99999999
- Pre-Auth Amounts (in cents):**
  - Online Amount to send to host: 0
  - Offline Amount to send to pump: 0

6. Verify the Cash Back amounts; you may disable cash back by unchecking the Allow Cash Back option under Processing Flags.
7. By default, ConnectPay is not taken offline; to enable offline transactions; you may check the Allow Local Auth options for Purchase and Return, along with the Allow local Void options. Connect Pay only supports Purchase and Return.
8. Save any changes.
9. Go to Site Information | Host Processor Definition.
10. Select the Concord H&C tab on the left. If there is no Concord H&C Tab, then you must first define concord as a host in your Terminal Configuration (Configuration \ Terminal Configuration > OpenEPS Lanes).



11. Verify the ConnectPay Enabled checkbox is checked, and the desired prefix is displayed in the text box. The prefix must match the prefix in the Allowable Card Prefixes table for Connect Pay. The default value is: 1639635

## External Program Changes - UpdateXMLFiles.Exe #1:

# UpdateXMLFiles.Exe

## XML Configuration File Update Program

The UpdateXMLFiles.exe is a program designed to update WinEPS XML configuration files. It is a tool for making the same set of limited changes to multiple WinEPS installations at different store locations while leaving all other configuration settings untouched.

The UpdateXMLFiles Graphical User Interface is used to create an Action File; this Action File contains a list of instructions for changing one or more WinEPS configuration files. Once the Action File is created, it can be applied to WinEPS installations where only the designated changes are made to the WinEPS Configuration files. This allows pinpoint configuration changes to be applied to multiple store locations.

### Key Points

- UpdateXMLFiles.exe must be run from the EPS directory.
- The UpdateXMLFiles.exe is used to both create the Action File that contains the list of changes, as well as being used to implement those changes, either from command line or GUI option.
- Changes can be made to one or more WinEPS XML Configuration files; the Action File will contain the list of changes, as well as noting to what WinEPS XML Configuration files those changes apply:
- One Action File is all you need for all of your changes regardless of how many WinEPS configuration files you want to modify.
- Users of UpdateXMLFiles should have some basic understanding of XML files and their structure; the WinEPS configuration files are in XML.

## Use Overview

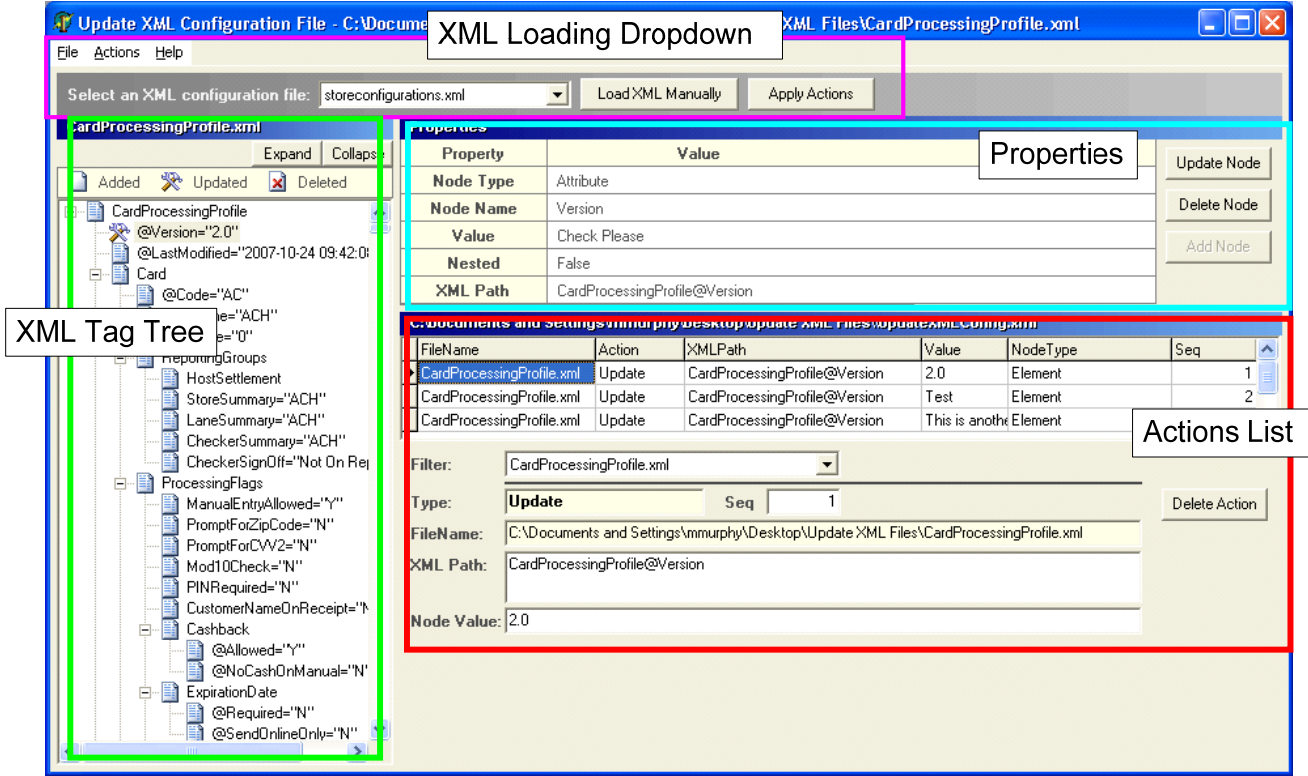
After installation, the user opens UpdateXMLFiles.exe, and uses the GUI to create an Action File; this is accomplished by selecting a WinEPS XML configuration file, choosing a setting, and entering a new value for that setting (See Chapter 2 for use details). Once all the new settings have been entered, the user then selected Save, which creates the Action File.

After the Action File is created, the user may take the UpdateXMLFiles.exe and the action file to a WinEPS system, and process the Action File to implement the saved changes. This will update only the fields the user has selected, and no other information will be changed.

It is recommended that the user review the log file to verify that the update proceeded without errors.

Below is the description of the UpdateXMLFiles GUI functionality. For complete information on UpdateXMLFiles, refer to the UpdateXMLFiles User's Guide.

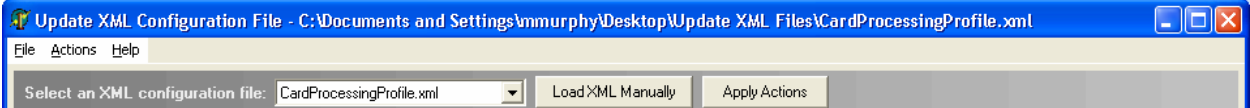
**UpdateXMLFiles GUI Screen**



**UpdateXMLFiles GUI**

**XML Loading dropdown & Button**

The top portion of the GUI allows access to the File, Actions and Help menus as well as the XML selection drop down. This dropdown is used to initially load an XML Configuration File to edit, as well as easily switch between several XML Configuration files that you have loaded to work on.



Menu Options	Description
File	<ul style="list-style-type: none"> <li>New – Discards the current Action File and starts a new one.</li> <li>Open – Opens a pre-existing Action File to allow updating to it.</li> <li>Save – Saves the current Action File.</li> <li>Save As – Saves the current Action File under the name you specify.</li> <li>Exit – Quits the program.</li> </ul>

Menu Options	Description
Actions	Delete action – Deletes the action that is currently selected and showing at the bottom of the screen. Same as the Delete Action button. Apply Actions – Applies all of the instructions in the Action File, updating all affected WinEPS XML Configuration Files. Same as the Apply Actions button.
Help	Help - Brings up the Help screen About – Displays version information for UpdateXMLFiles

Dropdown and Buttons	Description
Select an XML Configuration file	This dropdown box lists all of the XML files found in the folder in which UpdateXMLFiles is running, as well as files that have been manually opened by the user during the current session. It can be used to quickly switch between WinEPS configuration files.
Load XML Manually	Clicking this button will open the file loading dialog, and allow the user to select a WinEPS configuration file to edit.
Apply Actions	This button will apply all of the Actions that are in memory, updating the WinEPS XML Configuration files. Use this button only when it is desirable to implement the changes you have made.

### XML Tag Tree

The XML Tag Tree section of the GUI displays a tree version of the WinEPS XML file that is currently selected/loaded (the selection and loading of an XML is performed with the Select an XML configuration file dropdown, or the Load XML Manually button as described above).

The Tag Tree section is used to select a tag to update. When a tag is selected, its information appears in the Properties section to the right.

The screenshot shows the WinEPS GUI interface. On the left is the XML Tag Tree for 'CardProcessingProfile.xml'. The tree structure is as follows:

- CardProcessingProfile
  - @Version="2.0"
  - @LastModified="2007-10-24 09:42:08" (Selected)
  - Card
    - @Code="AC"
    - CardName="ACH"
    - FleetType="0"
  - ReportingGroups
    - HostSettlement
    - StoreSummary="ACH"
    - LaneSummary="ACH"
    - CheckerSummary="ACH"
    - CheckerSignOff="Not On Re"
  - ProcessingFlags
    - ManualEntryAllowed="Y"
    - PromptForZipCode="N"
    - PromptForCVV2="N"
    - Mod10Check="N"
    - PINRequired="N"
    - CustomerNameOnReceipt="
  - Cashback
    - @Allowed="Y"
    - @NoCashOnManual="N"
  - ExpirationDate

On the right is the Properties window for the selected '@LastModified' attribute:

Property	Value
Node Type	Attribute
Node Name	LastModified
Value	2007-10-24 09:42:08
Nested	False
XML Path	CardProcessingProfile@LastModified

Buttons for 'Update Node', 'Delete Node', and 'Add Node' are visible on the right side of the Properties window.

The Properties section displays the values associated with the selected XML Tag.

#### Expand & Collapse Buttons

The Expand and collapse buttons control the tree view of the XML configuration file. The default view is fully expanded. The Collapse button will cause the whole tree to collapse to a single tag entry (the file name).

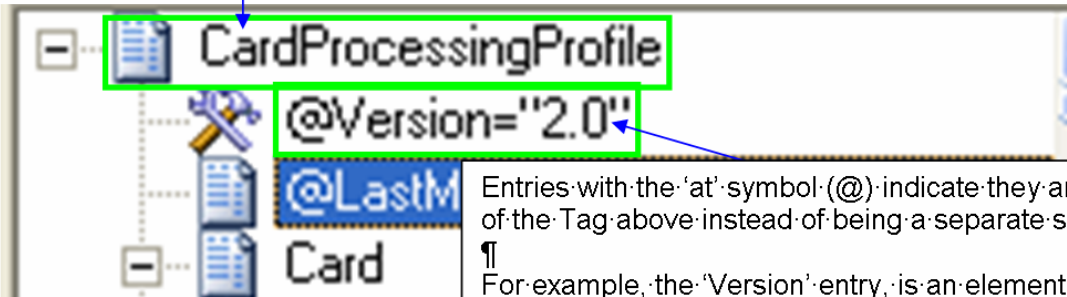
Once collapsed, the user can then individually tree out just the sections they want to view.

To return to the original expanded view, simply select Expand.


#### XML Tag Tree Identifiers and Symbols


The Tag Tree shows some specific details about the WinEPS XML configuration file that is currently open as well as displaying which tags have an Action associated with them.

The top of the tree is the name of the XML configuration file¶



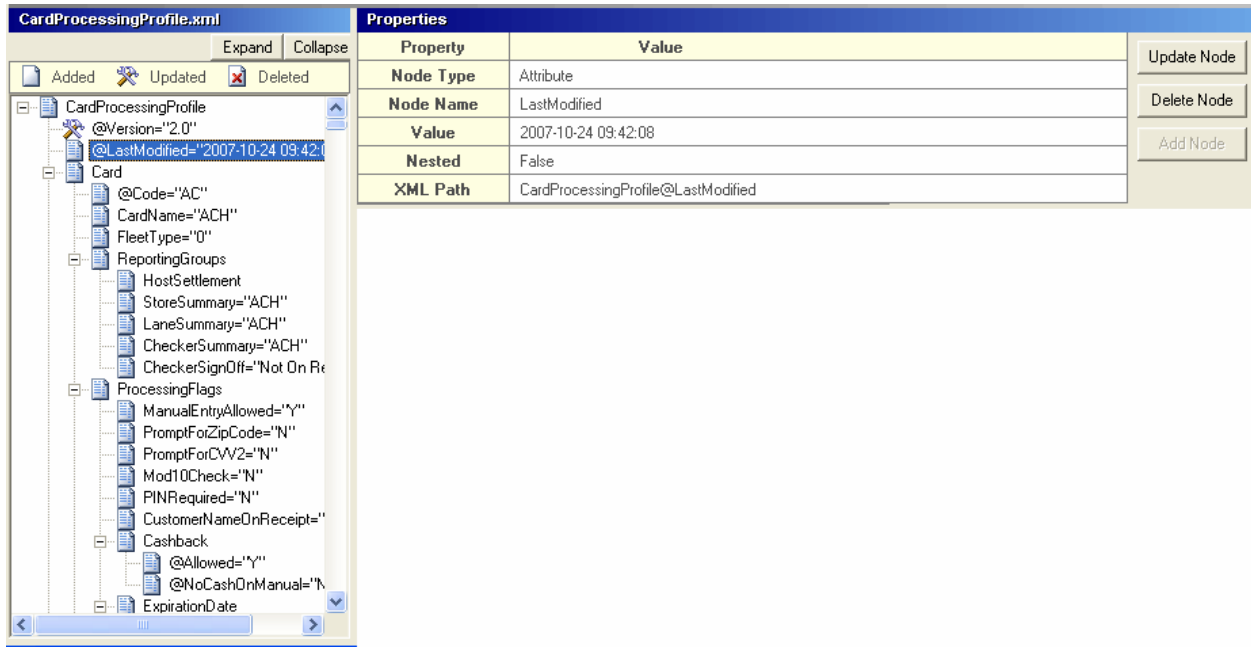
Entries with the 'at' symbol (@) indicate they are elements of the Tag above instead of being a separate sub-tag.¶  
¶  
For example, the 'Version' entry is an element and would appear in the actual XML file as shown below:¶  
<CardProcessingProfile Version="2.0" LastModified="2007-10-24 09:42:08">¶

 The hammer and wrench symbol indicates that a change Action has been made for this tag; that Action can be found in the Actions list.

 The standard icon indicates that no change is listed for this tag.

### Properties Section

The Properties section displays the values associated with the tag that is currently selected in the XML Tag Tree.



The Properties section has tree buttons on the right side: Update Node, Delete Node and Add Node. These options will apply to the currently selected tag. Buttons which have operations that cannot be applied to the currently selected tag will be grayed out.



*The buttons are labeled as ‘Node’ because the action will apply to the item selected in the tree view. This item could be an XML Tag, or an element of a tag. For simplicity, they are collectively referred to as nodes.*

Properties Buttons	Description
Update Node	Selecting this button will create an Action that will change the Value field of the listed properties.
Delete Node	Selecting this button will create an Action that will delete the selected tag and all sub-tags.
Add Node	This button will create an Element, Element with an attribute, or an attribute for the node selected. See below for examples.

### Actions List

The actions list section displays the list of instructions for actions that have been created and give the user the ability to make changes to them. The list of actions is a composite of the actions found in the loaded Action File as well as any that the user has created during the current section.

At the top of the Actions List section is a path and file name that indicates the name of the Action File that is currently in use.

The actions displayed in the action list box are controlled by the Filter. Setting the Filter to “Show All Record(s)” will display the entire list of actions that have been created.

FileName	Action	XMLPath	Value	NodeType	Seq
CardProcessingProfile.xml	Update	CardProcessingProfile@Version	2.0	Element	
CardProcessingProfile.xml	Insert	CardProcessingProfile\Card@Code=""		Element	
CardProcessingProfile.xml	Insert	CardProcessingProfile\Card@Code=""	Value	Element	

Filter: CardProcessingProfile.xml

Type: **Insert** Seq: 2 Delete Action

File Name: C:\Documents and Settings\mmurphy\Desktop\Update XML Files\CardProcessingProfile.xml

XML Path: CardProcessingProfile\Card@Code=""

Node Type: Element

Node Name: nodeName

Node Value: Value

Attr Name: AttrName

Attr Value: AttrValue

Action List sections	Description
Filter dropdown	The filter controls what Actions are displayed in the action list box directly above it.  Selecting a file name will show just the actions associated with that file; selecting Show All Record(s) will display the entire list of Actions.
Type	Displays the type of action for the action currently selected in the action list box. The type is not editable.
File Name	Display the name of the WinEPS XML Configuration file to which this action will be applied.
XML Path	Displays the location in the XML tree where this action will be applied.
Node Type	Element or Attribute; only displayed for Insert type actions. Determines whether the values will be applied as a sub tag (Element) or as part of the tag (Attribute).
Node Name	Only displayed for Insert type actions. Determines the name of the attribute or tag.
Node Value	The value of the tag or attribute that will be updated or inserted.
Attr Name	Attribute Name; only displayed for Insert type actions. The name of the attribute for an inserted element.
Attr Value	Attribute Value; only displayed for Insert type actions. The value of the attribute for an inserted element.

## Command Line Parameters

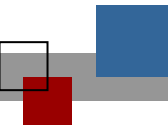
Implementing an Action File can be performed by command line parameter. It is important to note that UpdateXMLFiles.exe must reside in the \Program Files\MicroTrax\EPS\ directory for this to function properly.

The command line is:

UpdateXMLFiles.exe /s **ActionFileName**

Where **ActionFileName** is the name of your Action File.

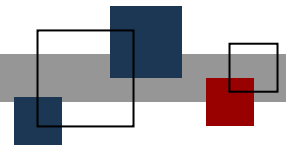
You may also use just “UpdateXMLFiles.exe /s” as the command line; in this case UpdateXMLFiles will use the default Action File name of UpdateXMLConfig.xml.



Suite 130  
Plano, Texas 75024







**© StoreNext Retail Technologies LLC 2008**

StoreNext Retail Technologies LLC endeavors to ensure that the information in this document is correct and fairly stated but does not accept liability for any error or omission.

The development of StoreNext products and services is continuous and published information may not be up to date. It is important to check the current position with StoreNext. This document is not part of a contract or license save insofar as may be expressly agreed.