

## 5.113 Release Notes

Version 08-400-001.14



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## What's New in OneTouch Suite 5.113

Build 9168	
S FIXED	<b>General</b> – Paymentech users will no longer encounter errors when issuing prepay refunds to fleet cardholders. (#64446)
	prepay refutius to theet cardinoiders. (#04440)

Build 9167	
+ ENHANCEMENT	Vanguard POS – Users can now set different starting drawer values for each of their registers (#62987)
	each of their registers. (#62987)

Build 9166	
🔶 ENHANCEMENT	<b>ccEngine</b> – Updated software to send NBS returns as authorization requests instead of capture requests. (#58716)
+ ENHANCEMENT	<b>General</b> – Expanded Visa Fleet BIN ranges to satisfy June 2018 Visa requirements. (#58714)

Build 9164	
FIXED	<b>General</b> – Enhanced system to better handle out of sequence NeXGen transaction notifications to avoid dropping fuel completion messages for repeat card usage with matching totals. (#58666)

Build 9163	
FIXED	<b>General</b> – Fixed an issue with unique private card configurations that were granting access to fuel products not in the restriction list. (#58644)
S FIXED	Sentinel
	<ol> <li>Improved the auto-detection on Sentinel configurations to decrease startup time. (#58630)</li> </ol>
	<ol> <li>The Sentinel service now stops within seconds of the stop service command being issued. (#58635)</li> </ol>
S FIXED	tPortController – tPort now sends out the EEEConfigurator card limits
	instead of the station limit for Track1 card reads under Paymentech. (#58586)



Build 9162	
	<b>Sentinel</b> – Enhanced Sentinel to support Matrix Orbital 4x40 display for increased usability in broad daylight. (#58595)
FIXED	<b>General</b> – Customer Driver and Customer Vehicle unique indexes are properly applied on first time setup execution as intended. (#58605)
FIXED	<b>MIM</b> – Updated MIM software to handle inventory adjustments by storing the actual on hand amount instead of the difference. (#58611)
FIXED	<b>Sentinel –</b> Added IsDeleted = 0 filter to site level prompts to prevent AdvancedPrompts from pulling in soft deleted records. (#58609)

Build 9159	
+ ENHANCEMENT	<b>General</b> – Created new DataManager form to help technicians create and validate private card layouts. (#31473)
	<b>Marshal Sync Server</b> – Users now have the option to configure their private card track layouts at the home office and sync them down to all sites. (#56354)
FIXED	<b>cpController</b> – Resolved rare gift card balance-over amount defect to ensure transactions that are pennies over the available funds are not incorrectly reported as dollars over. (#57526)
S FIXED	<b>General</b> – Removed unsupported SQL script syntax that was resulting in failed updates on SQL versions prior to 2012. (#57538, #57543)
FIXED	<ol> <li>Sentinel</li> <li>Overhauled the GetPricedItem method to better handle pricing levels and improve processing times for proprietary card authorizations. (#56396)</li> <li>Updated MagTek HID reader to use the same card reader logic as the serial MSR to avoid multi card read buffering. (#56398)</li> </ol>
FIXED	<b>tPortController</b> – tPort now properly updates saleheader/salepayment records after fueling has completed to account for tiered pricing scenarios where the original discount differs from the final repriced discount. (#56393)
FIXED	<b>Vanguard POS</b> – The cost of a fuel record will now be written to the saledetail record when prepay fueling is finished. (#56394)



Build 9153	
S FIXED	<b>General</b> – Added new fiber IP address to the test mode external IP list. (#56309)
FIXED	<b>Vanguard POS</b> – Register now deploys correct values for CustomerLookupWindowWidths to ensure the third column of the Customer Lookup popup is no longer cut off. (#56329)

Build 9151	
+ ENHANCEMENT	<b>ccToolkit</b> – Enhanced ccToolkit to detect when PrivateCardLayouts have changed and to automatically rebuild them when they are change to avoid having to restart applications while building/changing a privatecardlayout. (#45894)
+ ENHANCEMENT	DataManager
	<ol> <li>The Sales by Payment Method report (eee2056.rpt) now only includes completed sales. I.E Status 100 sales records. (#50302)</li> </ol>
	<ol> <li>Users can now more easily manage track in store inventory locations via a primary and secondary location. (#50335)</li> </ol>
	<ol> <li>The UseCategoryTaxRules checkbox will now be checked by default when users add a new inventory item. (#55887)</li> </ol>
+ ENHANCEMENT	<b>EEEConfigurator</b> – Added an option that allows loyalty cards with product
	restrictions to grant access to otherwise restricted fuel products when the Restrict Off Road Diesel to private cards feature is enabled. (#31628)
+ ENHANCEMENT	General
	<ol> <li>A new plugin is available that allows for the scheduled pricing of transactions process at the eeeHomeOffice. This will allow for a more reliable experience for users of the A/R package and credit limit enforcement across multi-site locations. (#49145)</li> </ol>
	<ol> <li>Core 5.113 applications can no longer be installed on systems running on an operating system older than Windows 7. (#35210)</li> </ol>
	<ol> <li>PrimaryKeyStartingValue is now self-maintained by the exportplugin and EEEPluginScheduler to help remove support maintenance with the goal of improving overall automated export speed over time. (#39311)</li> </ol>
	<ol> <li>Removed all NOLOCK hints to improve query reliability and overall system reliability. (#49116)</li> </ol>
	<ol> <li>Improved upon the ANDI, Dispenser, and DPT version gathering to store the history for all versions detected/changed over time. (#32735)</li> </ol>
	<ol> <li>MasterCard Fleet EMV cards with driver ID prompts will no longer result in a message format error under the NBS processor. (#53820)</li> </ol>

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	<ol> <li>Enhanced Sandbox to make it more readily apparent to technicians that a system is running Sandbox mode enabled. (#55978)</li> </ol>
	<b>Pioneer</b> – Enhanced system to write out any sales that used a POSExceptionRule to the Pioneer logs. (#49183)
	<b>pvController</b> – Enhanced pvController to push up to 10,000 cards with each card push operation. (#41560)
	Sentinel
	<ol> <li>Added option to mask customer input for Vehicle ID, Driver ID, and billing zip code at the zip code. (#49108)</li> </ol>
	<ol> <li>Added centralized Sentinel advanced prompting to allow for unattended safety training, access authorization, and marketing prompting. (#51548)</li> </ol>
	<b>tPortController</b> – Startup configuration messages are now tracked in ANDIConfigMessages, ANDIConfigMessageDetails tables as well as in a config startup log file tPortConfiguration.log which shows any time a configuration value at the site has changed since install (#31472)
FIXED	<b>AutoUpdater</b> – Automatic upgrade packages will not proceed with the installation process unless the target system is running the correct version. (#12225)
S FIXED	<b>ccToolkit</b> – Enhanced ccToolkit to use the IsCardNumberColumn to determine if a layout section is a card number, rather than using the value in the valueType column. (#45893)
S FIXED	<b>Combo Configurator</b> – Fixed calculations for dynamic percent-based combination discounts on group items. (#51547)
FIXED	cpController
	<ol> <li>The WritePlaceholderItemsForIncompletePioneerSales now also updates the Status and InvoiceNumber to ensure the transactions will appear on reports/exports as expected. (#52643)</li> </ol>
	<ol> <li>cpController properly declines a transaction with a 910 message instead of a negative authorization amount when a customer's balance exceeds or meets the credit limit. (#52650)</li> </ol>
	<ol> <li>Enhanced cp720TransactionFetcher to properly parse out product codes when they are in an irregular format. (#32925)</li> </ol>
S FIXED	DataManager
	<ol> <li>The Sales Profit Margins by Category (eee2030.rpt) and Sales Tax Collected by Category (eee2093.rpt) reports can now be reconciled with the other sales reports. (#50334)</li> </ol>
	<ol> <li>System now allows users to configure customer tax exemptions for all products that share the same description but have unique stock numbers. (#50426)</li> </ol>



	3.	Generating priced transaction for a time period without any sales no longer erroneously writes out an error. (#51491)
	4.	Sales by Payment Method report (eee2056.rpt) now displays grand totals. (#50425)
	5.	Daily Card Sales report (eee2017.rpt) and Daily Sales Report (eee2017.rpt) now display grand totals. (#50424)
	6.	Inventory receipts that haven't been received and adjustments that haven't been applied can now be deleted. (#13439)
	7.	A confirmation popup now displays after a user rolls back invoices or statements. (#29376)
	8.	Addressed rounding errors with discounts at the line item level on the Sale Detail by Date and Category report (eee2010.rpt). (#45890)
	9.	The Gallon Summary and Discounts report (eee2053.rpt) now properly handles split tenders. (#46980)
	10.	Transactions in the Private Card Sales by Customer and Card report (eee2023.rpt) will now be sorted chronologically. (#50303)
	11.	The Customer Activity Report (eee2032.rpt) now accurately sums all the displayed values. (#52658)
	12.	Users can now properly enter manual entry private card refunds by typing in their customer's card number rather than using dropdown selection. (#52659)
	13.	The corrective install product mapping feature is now accessible on Pioneer sites via a new menu option; users no longer have to wait for the unmapped product message to display. (#53735)
	14.	DriverNumber and VehicleNumber values are now consistently restricted to 8 digits at the database and form levels. (#53821)
	15.	The system will no longer deploy more than one record to the reports list for the Adjustment Report. (#55943)
	eee	eConfigurator
	1.	Users now have the option to remove the 'Prepay Fuel Refund' and 'Prepay Not Dispensed' line options from receipts. (#51508)
	2.	Added database configuration options for enabling SecurVision to the eeeConfigurator. (#56144)
FIXED	3.	Technicians can now generate preconfiguration files in house to import site settings and minimize the amount of work to be done on install day. (#56156)
	4.	Executing ExportSettings multiple times now only exports changes that have been made without restarting the eeeConfigurator. Technicians can also now export settings more than once per minute. (#56165)



	Email Assistant
FIXED	<ol> <li>The Resend Email button now functions properly and updates the resend records. (#34077)</li> </ol>
	<ol> <li>Addressed page numbering error with the Invoices – Vehicle Format report (eee2027.rpt). (#20110)</li> </ol>
	General
	<ol> <li>Transaction limits now function the same across all POS terminals (DPT, Vanguard Register, Sentinel). (#56216)</li> </ol>
	<ol> <li>SVC Authorizer software is now able to recover from database connection failures instead of blocking indefinitely where a manual restart of the app was required. (#25455)</li> </ol>
	<ol> <li>Saledetail SalePaymentID column is to not be utilized in any views/code paths. Made attempts to remove any erroneous usages of this column. Technicians to be made aware of deprecated column. (#42577)</li> </ol>
	<ol> <li>Removed all instances of TOP x percent views and procedures to make all said objects execute more quickly. (#49115)</li> </ol>
	5. Added verbose logging to the Health Notifier plugin. (#25467)
	<ol> <li>Removed ChilkatAX.dll from the deployment packages being installed on sites that don't use ChilkatAX.dll. (#35215)</li> </ol>
S FIXED	<ol> <li>FuelLink cards will now be successfully processed in 5.113+ versions of software. (#39337)</li> </ol>
	<ol> <li>Removed erroneous usage of FixQuotedString if combined with command objects. (#50298)</li> </ol>
	<ol> <li>Added trigger that blocks the insertion of new private card layouts without a proper associated private card type. (#49144)</li> </ol>
	<ol> <li>Addressed discrepancies between the standard automated export and the supporting documentation. (#27992)</li> </ol>
	<ol> <li>The Heartbeat sync deployment problem was resolved to ensure set is deployed for upward synchronization. (#55865)</li> </ol>
	<ol> <li>The CleanBackup application now notifies the user if any errors occurred during the backup process; will enable technicians to enact appropriate troubleshooting procedures. (#49181)</li> </ol>
	<ol> <li>Updated the SandboxSettings.SQL file to ensure merchant settings are completely cleared. (#48081)</li> </ol>
	<ol> <li>Improved the process of switching from Sandbox to live mode. (#56118)</li> </ol>
FIXED	<b>Health Monitor</b> – Updated application to only send the most recent message/alert for Site Down, Process, and Receipt Paper notifications if multiple pending messages have already been generated. (#27619)



	Marshal Sync Server
	<ol> <li>Improved reliability of syncing ROA payments. (#52682)</li> </ol>
S FIXED	<ol> <li>Improved reliability of fuel reporting at the server level. (#52657)</li> </ol>
	<ol> <li>Enhanced system to prevent errors with synchronization of previously deleted customers and private cards for multi-site remote databases. (#55985)</li> </ol>
S FIXED	<b>Pioneer</b> – Pioneer now handles 550 delete transaction messages and results in voided sales to maintain consistency with void sale operations performed in Vanguard environments. (#53818)
FIXED	<b>pvController</b> – Enhanced application to write the account number to the SalePayments table. (#35213)
FIXED	<b>Sentinel –</b> SecurVision can now capture images while the Sentinel Windows PC is locked and while the Live Feed viewer app is running. (#56259)
FIXED	<b>tPortController</b> – GetItemInfoFromProduct is now able to handle the NULL/Empty esCCHProductCode and esProductShortName fields by utilizing the left 3 characters of Inventory Description if values have not been specified at the item/database level. (#50338)
	Vanguard POS
	<ol> <li>Register now removes private card/customer discounts when a private card/customer charge tender is rejected from the sale due to an item restriction or other failure. (#56207).</li> </ol>
	<ol> <li>Updated system to provide true serial MSR backup MSR support. (#52677)</li> </ol>
	<ol> <li>Register now prints the sale total and subtotal lines on receipts for \$0.00 transactions. (#51469)</li> </ol>
FIXED	<ol> <li>Modified application to ensure that the first terminal to initiate a FinishSale request through the PumpToolbar will win the request, preventing other terminals from attempting to finish the same sale. (#50300)</li> </ol>
	<ol> <li>Enhanced the register so that fuel prices can be suppressed on receipts both inside and outside. (#49146)</li> </ol>
	<ol> <li>Split tender sales involving either on account or private card charges and some form of cashback now properly calculate the total that came from the account. (#49177)</li> </ol>
	<ol> <li>When a VOID is issued for a prepaid fuel sale that goes undispensed, the refund icon on the PumpToolbar now disappears. (#49292)</li> </ol>
	<ol> <li>Enhanced system to ensure that if an EMV card is removed prior to sale total confirmation, the card will not process without actually finishing the sale. (#50291)</li> </ol>



- 9. The register and PIN pad will now be immediately usable after being rebooted for UIA or EMV configuration upgrades. This will remove the frequent secondary Register restart that was required after the system updated. (#55973)
  10. The register and Ingenico PIN pad no longer freeze when a chip card is
  - removed during PIN entry. (#55932)
  - 11. The POS now displays a cashier prompt when a card swiped at the gift card prompt is not a gift card. (#55963)

Build 9109	
ENHANCEMENT	<b>DataManager</b> – Users can now attach or change the vendor associated with given inventory receipts without having to change the products. (#27991)
FIXED	<b>General</b> – Fixed rare error that caused a switch from NBS to Paymentech processing on a small percentage of systems that experienced issues during initial installation. (#55910)

Build 9108	
FIXED	<b>Vanguard POS</b> – Fixed rare error that occurred when users changed the quantity and prices of existing items while attempting to scan another item. (#53799)

Build 9107	
	<b>Sentinel –</b> Added option to display active fuel products and their prices on the Sentinel idle screen. (#49239)
FIXED	<b>AUClient</b> – AUClient is now the only setup package that deploys/updates the eeeErrorViewer. (#52593)

gurator – Updated system to ensure that users can still control refund eligibility duration from the Configurator. (#51527)



S FIXED	Vanguard POS
	<ol> <li>Stop commands issued during fueling on prepaid sales will no long cause errors. (#50449)</li> </ol>
	<ol> <li>The cash to pump feature now writes out the PrepaidFuelHistory record; users will now be able to issue refunds using this feature. (#51497)</li> </ol>

Build 9103	
FIXED	<b>Sentinel –</b> Increased serial MSR wait time to ensure both Track 1 and Track 2 data on private cards is processed. (#52597)

Build 9100	
FIXED	<b>cpController</b> – Pioneer environments now properly handle discounted refunds. (#46981)
S FIXED	DataManager
	<ol> <li>Resolved an error that occurred when users accessed the same field repeatedly in a recordset (i.e. the dispenser value). (#44684)</li> </ol>
	<ol> <li>Modified the Paid-Outs by Date and Category report (eee2001.rpt) to also display Paid-In activity. (#42576)</li> </ol>
	<ol> <li>Fixed type conversion error in the DataManager check for unmapped Pioneer sale logic. (#37293)</li> </ol>
	<ol> <li>Discounted Sales Report (eee2058.rpt) now also displays a customer's name followed by discount if a loyalty card was used. (#42575)</li> </ol>
	<ol> <li>Users can now adjust the size of the DataManager main window any of the child windows are maximized without crashing the application. (#45891)</li> </ol>
	<ol> <li>Users with over 32,767 inventory items will no longer encounter errors when managing their inventory pricing, unmapped products, and quick menus. (#46975)</li> </ol>
	<ol> <li>Clicking the X button to close the Quick Menu configuration window no longer results in an error. (#46977)</li> </ol>
S FIXED	<b>General</b> – Updated system to ensure all auto update parent wrapper setups are digitally signed. (#45695)



S FIXED	<b>tPortController</b> – Resolved a CustomForecourtProgramming message problem where the system was sending DIS++ H00Y both when long/short format was enabled, resulting in unnecessary noise in papertrail logging. (#37289)
FIXED	Vanguard POS
	<ol> <li>Fixed 'Unable to combine loyalty with private card charges' error. (#44694)</li> </ol>
	<ol> <li>The Credit Tender field on the POS now properly auto populates with the available balance on Cenex gift card transactions. (#43592)</li> </ol>
	<ol> <li>Suspended private card sales now properly clear out the associated account. (#39348)</li> </ol>

Build 9099	
	<b>General</b> – Improved the overall gift card user experience and addressed inconsistencies between Cenex and Private gift activation/recharge procedures. (#12818)
	<b>Email Assistant</b> – Enhanced notifications to include additional captured data to more closely resemble printed POS receipts. (#45700)
	Vanguard POS – Users can now configure their own custom POS cashier prompts. (#41478)
FIXED	DataManager
	<ol> <li>Updated system to evaluate the number of columns in standard exports and use appropriate white space padding. (#49087)</li> </ol>
	<ol> <li>Users can now open reports as many times as desired without having to close DataManager to reset the count. (#49086)</li> </ol>
	<ol> <li>System will no longer throw an error when receiving negative quantities on inventory receipts where the On Hand Quantity and the Quantity Received equal 0. (#41520)</li> </ol>
	<ol> <li>Fixed error thrown after selecting 'No' on the Private Card Deletion prompt. (#41481)</li> </ol>
	<ol> <li>The Edit Customer form will no longer store erroneously added additional quotes to stored description values. (#49236)</li> </ol>
FIXED	Email Assistant
	<ol> <li>Users can now control the Show Sales Tax and Discounts parameter in the Private Card Sales by Customer and Card report (eee2023.rpt). (#39306)</li> </ol>



	<ol> <li>Email Assistant now properly parses the Private Card Sales by Customer and Card report (eee2023.rpt). (#35216)</li> </ol>
S FIXED	General
	<ol> <li>VehicleDescription will now be recorded in SaleAdditionalInfo table consistently at all POS types. (#49234)</li> </ol>
	2. Resolved Midax PigPoint barcode scanning problem. (#48046)
S FIXED	Vanguard POS
	<ol> <li>Improved the Finish Sale performance by removing unnecessary looping logic. (#49114)</li> </ol>
	<ol> <li>Users can now recharge gift cards when swiping on a backup MSR. (#48048)</li> </ol>
	<ol> <li>Cashier prompts will now function in synchronized environments. (#41519)</li> </ol>

Build 9094 – Enhancements		
+ ENHANCEMENT	AutoUpdater	
	1. Added verbose logging toggle to the AUServer service. (#27730)	
	<ol> <li>Enhanced AUClient and Server to transfer upgrade packages over a TCP/IP connection with TLS 1.2 rather than using a second FTPS connection. (#25480)</li> </ol>	
	<ol> <li>Enhanced AUClient to report software license duration information to the AUServer; will allow customers paying for a subscription model to receive renewed licenses before the expiration date elapses. (#15631)</li> </ol>	
	<ol> <li>Enhanced AUClient to establish a connection with the AutoUpdater server using TLS 1.2 and to support receiving connections at the server from clients requiring TLS 1.2 negotiation. (#15660)</li> </ol>	
+ ENHANCEMENT	ccEngine	
	<ol> <li>Updated ccEngine to replace special unprintable characters with printable ones for easier parsing and communication of log examples to payment processors for debugging purposes. (#31535)</li> </ol>	
	<ol> <li>Enhanced ccEngine to send optional [Tagged Aux Refs] in credit card processing messages. (#28098)</li> </ol>	
	<ol> <li>Enhanced ccEngine and ccToolkit to support EMV card processing interfacing with the Ingenico iSC250 device. (US #8582)</li> </ol>	
	<ol> <li>Added support for 'Update Logical Session' message to handle EMV Config and CA Keys updates; will automatically update the latest EMV CA keys. (#12298)</li> </ol>	



	<ol> <li>ccEngine now processes credit transactions over the internet securely using PCI 3.0 supported TLS 1.2 protocol. (#12863)</li> </ol>		
	<b>ccToolkit</b> – Created Pioneer_GetSeed.sql file to ensure that the GetSeed procedure is deployed if not present in Pioneer configurations to avoid errors constructing cards in the toolkit. (#10783)		
+ ENHANCEMENT	cpController		
	<ol> <li>Added configurable option for removing zero-priced transactions when writing sales to the database. (#39312)</li> </ol>		
	<ol> <li>Converted cpController into a windows service with a cpControllerViewer as the replacement GUI component of the application. (#30590)</li> </ol>		
	<ol> <li>System now better matches 121 messages received with 'null' posSaleIdentifier with existing in-memory POSTransactions for which 121 messages haven't been received yet; will help prevent missing transactions at Commander locations when the commander sends a bogus POSSaleIdentifier in the 121 message. (#27669)</li> </ol>		
	<ol> <li>The logic that pulls data off the serial port now properly handles situations when the POS doesn't send the LRC after the ETX in a message or sends the IRC in the wrong position. (#27668)</li> </ol>		
	<ol> <li>Updated system to write a SaleHeader record to the database with POSSaleIdentifier and SaleTotal upon receipt of the 001 message. (#27667)</li> </ol>		
	DataManager		
	<ol> <li>Added new Adjustment Report that displays all adjustments that occurred over a given date range. (#36248)</li> </ol>		
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9.	When removing an invoice from the database, all associated records will be appropriately updated. (#12648)
1(	<ol> <li>Updated software to allow users to customize message that displays on the POS when no dispenser communication is detected without use of custom SQL statements. (#12282)</li> </ol>
1'	. Created EMV/Chip configuration reports for each major card brand: VISA, AMEX, MasterCard, Discover. (#9441)
12	<ol> <li>Created EMV/Chip CAPK (Public Key) Report that captures CA Key data from the XML file on the Ingenico PIN pad and stores it in the database. (#9442)</li> </ol>
1:	<ol> <li>Added EMV mandated POS Transaction Statistics Report. (#9443)</li> </ol>
14	<ul> <li>Created EMV/Chip fallback report that provides detailed information on EMV chip fallback transaction processing. (#9444)</li> </ul>
15	5. Created EMV mandated EMV/CHIP Transaction Report. (#9445)
10	<ol> <li>Created Private Card Transaction Limits report (eee2094.rpt) that shows private card transaction limits. (#8903)</li> </ol>
17	7. Added Payment Type column to Sales List. Updated Sales Entry form to display last four digits of credit card number. Customers will also be able to toggle between Invoice Number and SystemID headers. (#5904)
18	<ol> <li>Added Driver ID # column to Private Card Sales by Customer and Card report (eee2023.rpt). (#8358)</li> </ol>
19	<ol> <li>Added a Preview button that generates a sample report with sample data and a basic report description to all reports. (#8365)</li> </ol>
20	<ol> <li>Enhanced Sales by Payment Method Report (eee2056.rpt) to display data for each site; will enable users to run the report accurately from their home offices. (#8658)</li> </ol>
2'	. AR Trial Balance report now uses the new payment methodology when calculating balance summations. (#12925)
22	2. DataManager forms now automatically resize to fit all of the contents without requiring horizontal scroll bars. When possible, forms also open to default size to eliminate vertical scrollbars. (#13176)
23	<ol> <li>DataManager now supports applying a payment to accounts even if there are no invoices to make payments towards. (#13346)</li> </ol>
24	<ul> <li>Legacy reports are now automatically hidden from view and added to the hidden reports list during the upgrade process. (#13446)</li> </ul>
25	<ol> <li>Updated various reports to include time parameters in addition to existing date parameters. (#13516-#13528)</li> </ol>
20	<ol> <li>Added end date parameter to Register Shift Report (eee2092.rpt); will allow users to run the report for a broader time period. (#13529)</li> </ol>
27	7. Modified Sales Tax Collected Report (eee2087.rpt) to include a Customer Code parameter; will allow users to review sales tax collected for a specific customer. (#14962)



	<ol> <li>Improved loading time for the Discounts and Suspended Sales popups. (#12588)</li> </ol>
+ ENHANCEMENT	EEE Configurator
	<ol> <li>Enhanced the application to indicate the active payment processor. (#32930)</li> </ol>
	<ol> <li>Enabled EEEConfigurator to export and import configurations and apply them to other sites. (#12182)</li> </ol>
	<ol> <li>Enhanced overall application usability and made POSConfig tab more intuitive and easy to use. (#27940)</li> </ol>
	<ol> <li>Changed Report Idle as Calling and Report Calling as Idle checkboxes to dropdown menus to allow CS and users to configure pump calling options more easily. (#10775)</li> </ol>
🛨 ENHANCEMENT	EEEControlPanel
	<ol> <li>System information previously found in BGInfo is now also available from the EEEControlPanel. (#12989)</li> </ol>
	<ol> <li>eeeErrorViewer (EEEControlPanel) now raises visual error notification on launch if it cannot connect to the database. Error messages include sufficient descriptions to facilitate technician troubleshooting. (#6013)</li> </ol>
	<b>3.</b> Added confirmation popup message for users attempting to restart services; will add a layer of protection before stopping a business-critical service. (#13250)
🛨 ENHANCEMENT	Email Assistant
	<ol> <li>Updated Email Assistant to utilize reflections and late binding for the LicenseVerification.dll. (#9437)</li> </ol>
	2. Created application that allows users to send reports to their customers via email. (#8055)
	<ol> <li>Created E3 Email plugin which periodically sends emails that have been queued by other applications. (#8492)</li> </ol>
+ ENHANCEMENT	<b>FCT –</b> Users can now select time in addition to dates on FCT reports and can make button drop down items more configurable by POS type. (#12861)
+ ENHANCEMENT	General
	<ol> <li>Deployed application shortcuts to the shared public desktop instead of the active user's desktop. (#12526)</li> </ol>



- 2. Created SandBox testing mode, which will allow users to freely use the software without saving data and the changes they make before going live. (#25444)
- 3. Authored standalone download to allow clients to install the new MasterCard 2-series BIN range for releases prior to 5.113. (#33026)
- 4. Added non-clustered unique indexes to a subset of rlCustomerData tables to prevent them from receiving duplicate data. (#31474)
- 5. Enhanced product suite to process Paymentech over TLS 1.2 protocol. (#15632)
- 6. System can now handle both negative and positive discounts for contract or cost plus pricing. (#9373)
- 7. Added checks for the CustomerVehicles and PrivateCardCharges tables in the CheckSiteType stored procedure. (#27842)
- Added digital signature to software so that user Account Control does not display 'Unknown' and so that antivirus software does not flag it as suspicious. (#30638)
- Created utility to prepare clean, compressed backups of specified databases to transfer locally; will ensure backups do not include any sensitive data. (#27901)
- 10. Overhauled Customer Payments and Adjustments form to enhance overall usability and ease of use. (#27670)
- Created new generic DBTools class that is optimized for remote Azure DB access with integrated query retry and reconnection attempts. (#27739)
- All Triple E services now have their ImagePath properties wrapped in double quotes to ensure they are not susceptible to a Windows vulnerability. (#27615)
- 13. Added indexes to the CustomerPayment table; will improve table access speeds and usability. (#12278)
- 14. FTP uploader now has ability to auto-recover when network issues interrupt the FTP upload process. (#21189)
- 15. Updated system to capture and store card holder name from Track1 on outside CRIND and Sentinel sales. (#5037)
- Updated system to allow for scheduled task Command Line execution of the SQL Express Profilers to dump SQL performance data to a log file. (#9182)
- 17. Optimized private card authorization speed when using cards with transaction limits or gallon limits. (#9269)
- 18. PrivateCardCharges table no longer contains records more than 1 year old; will optimize query time. (#9270)
- 19. Added ability to add Health Alerts notification recipients with left arrow key; will allow users to add recipients in the event that drag and drop isn't functioning. (#9319)



	<ol> <li>Entire OneTouch Suite now includes new PCI Impact digit in splash screens; will increase user awareness of PCI/Security impact of new releases. (#12862)</li> </ol>	
	<ol> <li>Overhauled sales posting and accounts receivable process to pass populated objects rather than recordsets for massive speed boost; will provide more responsive overall user/Customer experience. (#12859)</li> </ol>	
	<ol> <li>All suite application logs now include version information in the header of all generated logs. (#13178)</li> </ol>	
	<ol> <li>Code paths where a comparison is performed between numeric/double values will not pass/fail incorrectly and will be evaluated for numeric comparison out to a limited number of decimal places. (#13325)</li> </ol>	
	24. Enhanced InTestingEnvironment startup logic to perform a comparison of the external facing IP against a list of 3 Triple E static IPs to determine if the system is running in test mode or not. (#13348)	
	25. Added ability to deploy the latest MasterCard, Visa, MC Fleet, and Visa Fleet BIN ranges to releases prior to 5.113. (#22181)	
	<b>Health Monitor –</b> Created new health alerts system and health monitor interface for monitoring the health of remote sites. (#6072)	
	<b>Navigator Site Controller</b> – Created stored proc to toggle between Gilbarco E700 prompts and generic prompting mode. (#25466)	
ENHANCEMENT	<b>Pioneer –</b> Enhanced cpController to support simulated 101 return messages. (#9250)	
	Sentinel	
	<ol> <li>Created optional attachment that captures and saves images of users swiping a card at the Sentinel. (#13352)</li> </ol>	
	<ol> <li>Added auto detection support for Noritake 2 line display on Sentinel. (#13448)</li> </ol>	
+ ENHANCEMENT	tPortController	
	<ol> <li>Added ability to complete sales based on receipt of a DPT C message, even if DIS I has not been received. (#28079)</li> </ol>	
	<ol> <li>Added timer that regularly sends configurable programming messages to the NeXGen and updated system to ensure that the DIS00 H00Y message is the last message sent during the startup routine. (#27872)</li> </ol>	
	3. Added ability to handle multiple idle prompts; will allow users with multiple pumps to maintain different prompts for each one. (#5523)	
	Vanguard POS	
	<ol> <li>Enhanced register QuickMenu to support certain image formats for button backgrounds. (#35198)</li> </ol>	



- 2. Added ability to print a suspended sale receipt that includes a tip and total line to accommodate for restaurant style scenarios. (#31662)
- 3. Enhanced the ISC250 to prompt for debit or credit whenever an EMV card is inserted or swiped. (#31563)
- 4. System now executes a routine during register launch that registers the OPOS OCX files on the disk prior to attempting to use any OPOS devices. Further, the FCT software dynamically loads the OPOS Printer control to avoid conflicts with the Epicor OPOS environments. (#27843)
- 5. Users can no longer add more quick menu buttons to the register than can be cleanly displayed; will prevent rendering errors. (#21152)
- Removed RestartINGOposso.exe from all deployment packages; users will no longer be instructed to press Ctrl+F10 when OPOS errors are encountered. Register drivers no longer rely on the INGOPOSSO.exe background process running. (#30849)
- Register now handles cash level pricing for debit cards originating from the Vanguard or DPTs in the dispenser. Additionally, users can now offer cash pricing when running the pump toolbar in Fuel Control Terminal mode by using the cash MOP selection. (#30645)
- 8. Added ApplePay and AndroidPay support to registers integrating with iSC250 Ingenico PIN pad. (#10651)
- 9. Register now accepts tap-to-pay Google Wallet transactions on the Ingenico iSC250. (#10649)
- 10. Register now displays completed signature when customers finish signing on the Ingenico iSC250. (#12968)
- 11. Merchants now have the option to disable Sale Total Confirmation screen on the Ingenico PIN pad. Additionally, Ingenico PIN pad no longer prompts for sale total confirmation when a card is swiped at the register backup MSR. (#12971)
- Register now fully supports environments without 2 line display and automatically disables 2 line default if an Ingenico PIN pad is in use; will increase reliability of POS configurations that don't have a 2 line display attached. (#13449)



Build 9094 – Resolutions		
S FIXED	AutoUpdater	
	<ol> <li>Increased the reliability of AUClient when downloading from the AUServer. (#22183)</li> </ol>	
	2. AUClient now automatically corrects configuration errors when the system GUID does not match the GUIDs stored in the local database; will reduce likelihood that configuration problems occur after a database backup is restored on to a different machine than it originated from. (#15712)	
S FIXED	ccEngine	
	<ol> <li>Updated system to ensure that any queued event code paths with a reference to the old code object become invalid and can't hold a reference to the previous transaction's card data. (#41422)</li> </ol>	
	<ol> <li>Updated ccEngineViewer to always display the most recent posted transactions instead of the oldest. (#12734)</li> </ol>	
	<ol> <li>Updated system to call the ForcePurgeOldEnctrypedPANData stored proc asynchronously to prevent ccEngine from potentially freezing for 5-30 seconds every hour. (#12916)</li> </ol>	
	<ol> <li>Updates against the ccRequest records inside the ccToolkit handle response logic no longer encounter failures due to the Unique constraint on the ccRequests_ReadyForAutoPurge table. (#26565)</li> </ol>	
FIXED	<b>ccToolkit</b> – Fleet cards now properly prompt for DriverID when requested, rather than incorrectly prompting for a PIN. (#8981)	
Ø FIXED	cpController	
	<ol> <li>Added toggle that switches between existing system behavior and sending Authorized Dollar amount equal to the balance on the card. (#21149)</li> </ol>	
	<ol> <li>Users can now set their max authorization limits up to 999999999 on a single transaction in a Pioneer environment. (#21194)</li> </ol>	
	<ol> <li>Log files will now be automatically archived when they reach a certain size; will ensure log files do not become excessively large and will allow technicians to easily open them. (#13111)</li> </ol>	
FIXED	DataManager	
	1. All sales reports now only include completed sales. (#39309)	
	<ol> <li>Added runtime parameter to the Fuel Sales by Dispenser &amp; Product report; will allow users to run a smaller version of the report resembling the original format. (#36240)</li> </ol>	



- 3. Updated system to ensure that query data and load data events do not fire if the SQLConnection hasn't been populated or before the form load even has finished. (#40381)
- 4. Inactive manual exports no longer display on the active export list. (#41480)
- 5. Fixed minor issues with Price Changes/Price Change History report and back dating pricing. (#25452)
- 6. Updated Invoice Report (eee2018.rpt) to display correct batch total page to allow users to see all invoice charges over a given time period without manually totaling all the pages. (#36247)
- 7. The Sales Profit Margins by Category Report (eee2030.rpt) now uses the correct cost values in its calculations and now displays the correct profit margins. (#32932)
- 8. Improved the tab index order on the Customer, Vendor, and Inventory forms to enhance usability for keyboard-heavy users. (#32928)
- 9. The Payment Details Report (eee2028.rpt) now properly sums all amounts listed. (#32751)
- 10. Users will find it easier to search for items when using the Find button on the Manual Sales Entry window. (#32752)
- The Remove Restrictions and Remove All buttons on the Edit Customer Product Restrictions tab will now display changes immediately. (#32753)
- 12. Enhanced Edit Customer and Add Customer forms to support more than 32,000 customers. (#31567)
- 13. Users can now properly set taxes at an item level without encountering issues. (#32926)
- 14. Users can now properly move cards from one account to another using the Get Customer button on the Edit Private Cards window. (#31533)
- 15. Headers now display on all pages of the Inventory Stock on Hand Report (eee2004.rpt). (#31626)
- 16. The Days value in the customer selection for generating statements now displays accurate data. (#27989)
- 17. Enhanced Customer Pricing form usability and search options. (#32871)
- 18. Made Discount Codes and Add/Change Discount forms more intuitive and user friendly. (#12689)
- 19. Large quantities no longer cause an overflow in the inventory adjustment form when cycling through vendors for other items or when performing an item lookup via the Find Item button. (#31411)
- 20. The "Please wait while loading" popup now only appears and shows progress if there is actual work to be performed. (#31419)



- 21. Users can now properly search for sales by date numerically. (#31418)
- 22. System now properly adjusts the average price on items when inventory receipts added to the system are unaccompanied by a price or cost change. (#21185)
- 23. Users can now perform a database backup prior to generating priced transactions. (#31211)
- 24. Updated all outdated references to "support@e3tek.com" to "helpdesk@e3tek.com". (#30598)
- 25. Daily Sales report (eee2062.rpt) now runs considerably faster on large databases and datasets. (#30520)
- 26. Removed gallon gift card concept. (#28004)
- 27. Updated Sales by Shift and Category report (eee2024.rpt) to calculate totals based on ExtPrice table instead of taxedDiscountedExtPrice table; will prevent rounding issues. (#21183)
- Updated Customer Activity report (eee2032.rpt) to show all customer activity, even if the records have the same date, amount, and description. (#27617)
- 29. Updated Inventory Stock on Hand report (eee2004.rpt) to have the ability to sort by item description. (#13440)
- 30. Sales Detail by Date and Category report (eee2010.rpt) Net Ext column is now extended to include 3 decimal places to more accurately reflect how totals are added. (#27740)
- 31. Updated Hourly Sales report (eee2014.rpt) to use sale totals instead of payment totals in its summations. (#27741)
- 32. Double-clicking headers in the Sales List screen alternates between ascending and descending sorting. (#25453)
- 33. Removed card payments recorded on the FCT from the Credit Card Reconciliation Report (eee2016). (#20116)
- 34. Updated system to ensure product restriction logic returns proper default values when the inventory isn't configured properly; will ensure customers with product restrictions will no longer be able to purchase all products even if the inventory isn't configured properly. (#20111)
- 35. Dispenser Totals By Product and Dispenser reports (eee2044.rpt) now separates all parts of the report by site. (#20108)
- 36. Removed all Integer variables used for iterating through cards/customers and any variables that could potentially receive a numeric value larger the 32,000 from the database; will prevent Edit Private Card form overflow error. (#25389)
- 37. Users no longer encounter "Please choose a Customer Name for this new card" error message when editing private cards and clicking OK without making a change. (#25359)



38. Users with more than 32,000 cards will be able to edit private cards using the Edit Private Cards form. (#25363) 39. Discounted Sales Report (eee2058.rpt) now properly calculates totals when there is more than one discounted item on a sale. (#9372) 40. AR statements will now be generated for customers that have an outstanding balance but no recent activity. Users will also be guarded against accidentally generating statements twice in a row. (#13336) 41. Removed adjustments from the credit balance; will prevent adjustments from affecting both the balance and credit balance. (#13110) 42. Customer List now displays the correct balance in the Balance column. (#13174) 43. The Dyed Diesel Sales by Customer Report (eee2050.rpt) now includes all of a customer's Dyed Diesel sales, including on account charges. (#20121) 44. Updated Address Lowered Report (eee2020.rpt) to run without errors; will address issues caused on systems upgraded to 4.52. (#13442) 45. Resolved defect that caused private sales reports to incorrectly display transaction counts as the number of separate line items. Reports eee2023 and eee2015 now maintain the proper transaction counts when multiple tenders are present in the sale. (#10642) 46. Addressed minor report defects and inconsistencies. Will increase report overall usability. (#12272) 47. Fuel prepays originating from an FCT that do not require interaction to finish the sale now remain properly associated with the employee who created the sale, as opposed to the currently logged in employee. (#10782) 48. Updated system to launch Edit Private Cards form much guicker, especially when loading a large card database. (#9181) 49. Dispenser Totals by Product Report (eee2044.rpt) now displays the correct totals. (#9203) 50. Cross-tab headers in Fuel Sales by Dispenser and Product Report (eee2005.rpt) are now visible when the report is exported to PDF format. (#8795) 51. Sales Profit Margins by Category report (eee2030.rpt) now properly shows duplicate items as separate line items on the same sale. (#8979) 52. Payment History Report now groups data by customer rather than date. (#13143) 53. FET/SET Exemptions Report (eee2029.rpt) is now available to all customers, not just customers who have purchased the AR package. (#13251) 54. Users using DataManager's manual export process with a stored procedure export definition will be able to see the true number of lines



	to be exported to the export file rather than a return value of -1. (#13338)
	55. Prices changed in DataManager within the same minute will now be displayed and updated consistently and correctly; will fix incorrect pricing allocation caused by records with the same timestamps. Most recent price change will take precedence, even if the records have the same timestamp. (#13353)
	56. Fixed payment backdating error causing balance issues; will ensure payments and credits are applied with the date specified by the customer rather than the date they were entered. (#13447)
S FIXED	EEEControlPanel
	1. EEEControlPanel no longer sets the eeePlugInScheduler to Automatic startup mode when the Restart Service button is clicked. (#21151)
	<ol> <li>Added SiteIDRestrictionParam column to the database to ensure eeeErrorViewer no longer throws an error upon launch on sites that haven't installed the basic file export plugin. (#21187)</li> </ol>
FIXED	eeePlugInScheduler
	1. Application now handles startup problems where the SQL server isn't available. Startup logic will continue to make startup attempts every 30 seconds until successful. This will eliminate many failed automated export issues reported by users. (#28261)
	<ol> <li>Updated EEEPlugInScheduler to ensure that scheduled plugins always execute on time when scheduled to trigger between 11:00 and 11:59pm. (#21186)</li> </ol>
	3. EEEPlugInScheduler no longer marks records that have been exported in the database unless the ExportPlugin has actually generated a file and the File.Exists property returns true prior to writing to the filestream. (#13298)
FIXED	FCT
	<ol> <li>FCT now requires that users enter a preset/prepay value greater than \$0.00 before the data is sent to tPort. (#12512)</li> </ol>
	2. tPortController now handles simultaneous prepay attempts from different terminals and properly only allows the terminal initiating the sale to finish the sale; will prevent stuck dispensers caused by separate terminals attempting to claim a sale simultaneously. (#12793)
	<ol> <li>FCT sites no longer report to the server as an "Unknown" type; will make FCT customers eligible for autoupdates. (#21191)</li> </ol>



FIXED	General	
	. Overhauled prepaid fuel handling and tracking to remove the status 50 defect and address consistency issues with sales records, orphans, synchronization issues, deadlocks, etc. (#32736)	
	<ol> <li>Custom error logging methods now include the version number. (#40368)</li> </ol>	
	<ol> <li>Created a stored procedure for gathering export information prior to troubleshooting. (#27728)</li> </ol>	
	I. Enhanced query execution times for a few stored procedures. (#6281)	
	<ol> <li>Addressed error in the toolkit SetCardInfo, which was previously resulting in an error after a card read in the dispenser. (#40383)</li> </ol>	
	<ol> <li>Enabled the BasicFileImport plugin to handle column names that include whitespaces and added ability to log any invalid column names. (#8758)</li> </ol>	
	7. System can now receive back office export quantities. (#15642)	
	<ol> <li>Resolved formatting issue with void credit requests under NBS processing (#32906).</li> </ol>	
	<ol> <li>GetPriceAndTaxesForItem logic is now able to handle data oddities that otherwise would prevent prices from being sent to the dispensers after an upgrade. (#32768)</li> </ol>	
	0. Updated system to ensure that only the original authorization reference number is used for debit transaction completion. (#31502)	
	1. PendingSettlements and SaleAdditionalInfo tables now properly mask the encrypted pin block sent to the payment processor. Existing transactions will also be sanitized if the pin block is un-masked. (#30644)	
	<ol> <li>Service applications now log an error before exiting when there is a problem with licensing. Additionally, fixed error causing EEEControlPanel to occasionally show incorrect licensing durations. (#28246)</li> </ol>	
	<ol> <li>Updated system to ensure that cardholder name and appropriate masked card number are printed on the CRIND receipt. (#27980)</li> </ol>	
	4. The vw_TripleEStandardAutomatedExportSource view now properly returns odometer values on sales rather than returning zeros. (#25445)	
	<ol> <li>Updated system to ensure that leading zeros in CenexRegionalCards are longer stripped out in the card object to allow settlement/post- authorization success. (#27883)</li> </ol>	
	<ol> <li>Updated system to only evaluate a card's magstripe service code for EMV chip enforcement if the system is first configured to accept EMV and has an attached Ingenico device and if the card swiped is Visa, MasterCard, Amex, or Discover. (#26574)</li> </ol>	





	<ol> <li>Updated MsComm control to check if the comm port exists before attempting to utilize it. (#27584)</li> </ol>
	<ol> <li>Software no longer allows NBS users to mix overrings with sale items for credit request transactions due to NBS limitations. (#20115)</li> </ol>
	<ol> <li>Created script that ports old product restrictions to the new paradigm; will prevent customers from losing their product restrictions when upgrading from 4.114 or prior versions. (#18041)</li> </ol>
	<ol> <li>Updated EtechMonitor application to be easier to use and more robust. (#13119)</li> </ol>
	21. Updated system to process Midax cards from either Track 1, Track 2, or both. Will ensure users receive payment card information even if the Midax or other loyalty card does not get a clean Track 2 read when authorizing the sale. (#20117)
	<ol> <li>Replaced "Enter Data" prompt on new Gilbarco dispensers with more relevant and intuitive prompts; will correct prompt issues for users using new Gilbarco E700 pumps. (#6951)</li> </ol>
	23. Updated system to address stuck pump issues. (#13114)
	<ol> <li>Updated system to ensure Manual Import/Export will not downgrade any objects that are essential for the import/export plugins to execute correctly. (#13123)</li> </ol>
	<ol> <li>Updated system to ensure DataManager correctly prevents and handles attempts to modify records in multi-site mode. (#13177)</li> </ol>
	<ol> <li>Updated system to apply decimal rounding before data is passed to the database to avoid truncation and losing significant digits. (#15625)</li> </ol>
	<ol> <li>Export plugin can now successfully open and append the same file when AppendToFile is flagged as true. (#15628)</li> </ol>
S FIXED	<b>Ingenico</b> – Enabled automatic language and application selection on the Ingenico; will eliminate unnecessary prompting and yield quicker EMV transactions. (#23253)
S FIXED	
	Marshal Sync Server
	1. Voided sales now properly sync up to home offices. (#29408)
	<ol> <li>Prepaid fuel sales will now be stored correctly at Marshal Sync Servers; will ensure sales data will no longer be inaccurate at the server due to erroneously synchronized prepaid fuel items. (#13347)</li> </ol>
FIXED	<b>Pioneer –</b> Added option for controlling how mathematical errors from the external POS system are handled by allowing for favoring of adjusting line item discounts when line items and header are not in agreement. (#8940)



S FIXED	pvController	
	<ol> <li>pvController now has ability to view customer drivers/vehicles as a means to perform multi-drive validation for private cards requiring a driver or vehicle. (#41456)</li> </ol>	
	<ol> <li>pvController now always logs all messages to the log file, regardless of what the log level is set to. (#33016)</li> </ol>	
	<ol> <li>pvController now properly marks SaleDetail fuel sale records as fuel items when writing sales to the database. (#20107)</li> </ol>	
	<ol> <li>pvController now properly handles product restrictions, ensuring product restrictions no longer generate errors when used in a PV environment. (#13337)</li> </ol>	
S FIXED	<b>Rollback Script Deployment</b> – EsController rollback script no longer fails when attempting to set certain DPTConfiguration properties from 'Y' and 'N'	
	to '1' and '0' for the ReportCallingAsIdle and ReportIdleAsCalling fields. (#22188)	
S FIXED	Sentinel	
	<ol> <li>Resolved defect causing Sentinel to process Track 2 card data from a transaction on the next card. (#45944)</li> </ol>	
	<ol> <li>Resolved defect with fill limits specified by interval at the Sentinel and DPT. (#31536)</li> </ol>	
	3. Sentinel no longer uses \$\$Retail\$\$ as the customer code when printing cardholder names for bank cards on receipts. (#27972)	
	<ol> <li>Sentinel now logs all messages to the disk, even if the Windows machine is logged out. (#21192)</li> </ol>	
	<ol> <li>Added conditional pause to ensure pedestal is unlikely to fail when claiming specific hardware. Will enable Sentinel to claim the MGR PIN pads more consistently. (#9279)</li> </ol>	
	<ol> <li>Combination of new K100 PIN pad and old Matrix Orbital display now works as expected. (#9382)</li> </ol>	
S FIXED	tPortController	
	<ol> <li>Enhanced tPort to utilize the first 3 characters of a product description in the event that esProductShortName or esCCHProductCode is not configured. (#12669)</li> </ol>	
	<ol> <li>Improved query times against SaleAdditionalInfo specifically targeting queries that involve searching for a particular VehicleIdentifier and SaleHeaderID. (#30597)</li> </ol>	





	3.	Removed updates performed via the recordset and changed method to utilize command object in order to prevent concurrency failure issues in the CheckSettlements method. (#28244)
	4.	Updated NeXGen recovery logic for TPC/IP failures to better prevent CCH problems. (#27962)
	5.	Updated the trgDispenserState_Status trigger to ensure it does not trigger unnecessary updates to the DispenserState_Status table; will prevent deadlocks from occurring when the DispenserState_Status table is updated. (#27904)
	6.	Updated system to better log out failures that occur when attempting to connect to the NeXGen via TCP/IP mode. (#27923)
	7.	Updated system to ensure that initial fuel prices are honored when price changes occur while customers are fueling. (#12832)
	8.	Updated system to guard against type mismatch errors when the owning device recovery is enabled. (#27580)
	9.	Removed 255-character limit for tPort log messages; will ensure important messages and information will not be lost. (#12280)
S FIXED	Va	nguard POS
	1.	Overhauled SalePayment logic to ensure the register is always writing SalePayment records. (#45934)
	2.	Added ability to require cashiers to finish suspended sales before ending the current shift. (#31585)
	3.	Users can now suspend sales with up to 16-character dollar amounts without throwing an error. (#31403)
	4.	If a sale exceeds a private card's transaction limit, the cashier will now be notified with a popup, and the Credit Tender field will be filled out with the card's available remaining credit limit. (#31413)
	5.	Updated system to ensure that if a stop pump command is issued, the prepay fuel item for that dispenser is removed and the sale is recalculated. (#27840)
	6.	Updated receipt printing logic to maintain the selected receipt type regardless of the selected payment type. (#10776)
	7.	Register now properly checks all fuel products on pending unsuspended sales to verify those that conflict with an active prepay are not pulled. (#12858)
	8.	Register no longer times out Sale Requests before ccEngine receives a response from the credit card processor; will prevent double charges during excessively long transaction durations. (#28229)
	9.	Mix and match combo discounts are no longer order dependent. Additionally, single products can now be associated with multiple active





- 10. Register now displays pump status information as soon as possible upon startup, even if a cashier has not logged in. (#27984)
- 11. Turned off Telium JPOS logging of informational events controlled by configlog.xml to prevent the OPOS background service from logging MSR events. (#27990)
- 12. Added more automated EMV configuration verification steps to the Register app launch process. (#27958)
- 13. Updated system to no longer throw errors when users issue a prepay refund credit. (#27956)
- 14. System no longer attempts to print EMV decline receipts unless the card is completely read and the TransactionPreparationResponseData was received. (#27949)
- 15. When removing items from the Vanguard POS active sale, the InProgressTransaction table now maintains the same order for externalID reference as the live/active transaction. (#27726)
- 16. Users can now sync ROA payments made at the register to their home office. (US #10639)
- 17. Register pump toolbar software now sets updates to the fuel total/volume while fueling is in progress. (#27577)
- 18. Register software now allows cashiers to choose the account to charge when retrieving a suspended sale where the account differs from the customer account in the current sale. (#25476)
- 19. Patron Lookup toggle now properly disables the patron lookup button on the POS when unchecked. (#12366)
- 20. Register software no longer requires a default Windows printer to be specified to prevent continuous error loop related to problematic inquiry of Windows printer font names (#25391)
- 21. Sales containing combo items can now be properly suspended and retrieved; will prevent defect causing formatting issues and discount errors. (#12274)
- 22. Sales finished inside now properly apply Midax discounts. (#19046)
- 23. Updated system to ensure customers using Windows XP machines will still be able to run all reports displaying signature images. (#10774)
- 24. Created option to customize the maximum quantity of combo eligible items that can be added to a sale; will prevent cashier from adding excessive amount of combo items that would cause major system slowdowns. (#12150)



- Register now disallows voids of ROA Payments that have already been applied to an invoice. (#9586)
  - 26. Register now displays progress loading bar and current loading step on the splash screen. (#8953)
  - 27. Bypassing DOB check for an age 18 restricted project will no longer auto-bypass the check for an age 21 restricted product that is subsequently scanned. (#8664)
  - 28. Employee charge receipts now retain employee name when reprinted through the Reprint Receipt function. (#13118)
  - 29. Modified card decline messages to provide more intuitive and helpful troubleshooting information. (#13145)

Build 1020 (AutoUpdater)		
	AutoUpdater	
	<ol> <li>Enhanced AUClient to automatically clear out pending upgrades in the PendingUpgrades table that are equal to or less than the active version of AUClient. (#28149)</li> </ol>	
	2. Database upgrade scripts now execute using ADO with Pascal from within the InnoSetup package instead of relying on SQLCMD. (#28151)	
	<ol> <li>Enhanced AUClient to deploy NT AUTHORITY\ANONYMOUS LOGON account to the SQL instance with restricted permissions to only Exec/Select AU objects and tables. (#28030)</li> </ol>	
	<ol> <li>Enhanced AUClient to fail over a secondary server for secured connections if first attempt fails. (#28041)</li> </ol>	
	<ol> <li>Integrated PaperTrail event log auditing and aggregation software to all machines; will allow Triple E technicians to monitor all errors being actively logged to the Windows event viewer. (#27844)</li> </ol>	
S FIXED	<b>MyCardUpdate</b> – Updated MyCardUpdate real-time sync logic to be more responsive and to synchronize data even when processing large queues of changes on both client and server sides. (#27616)	