



Release Notes

Release 3.11



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OVERVIEW

PRODUCT VERSION

- 3.11

BUILD

- 3.11.380.0

PREREQUISITES

- Any TS 3.10.x.x installed
- .NET Framework 4.5

ROLLBACK OPTIONS

- Once installed, this release cannot be rolled back

CREDENTIALS

- Unless otherwise noted, the installation instructions require the user to be signed in using the server's Local Administrator account

CLIENT RESPONSIBILITIES

Refer to the **Blackboard Transact IT Implementation Guide** (Doc PN 1407) for 3.11 that can be found on Behind the Blackboard.

The IT Implementation Guide describes the responsibilities for implementing Blackboard Transact Release 3.11 (Transact) and later, including:

- Firewalls and Routers
- Customer Server Installations and Configuration Requirements
- Blackboard Secure Remote Access Solutions
- Campus Information Security Policy

PREVIOUS RELEASE NOTES REFERENCE

This table provides a summary of the major GA (General Availability) releases and their point releases. The New Feature column is a summarized version of the original Release Notes for each release. For more information, please see the original version of the Release Notes on Behind the Blackboard.

Table 1-1: Previous Release Notes Reference

Release	Point Release	GA Date	New Feature
3.9		4/20/12	<ul style="list-style-type: none"> • Auxiliary Data Output Customer Number - the customer number leading zeros may be removed when using the Auxiliary Data Output for an MF4100. • Blackboard Host Services - all host services begin with Blackboard. • Cashier Card Number Login - a cashier swipes their customer card at a POS device to login under their cashier account. • Device Firmware Update - Blackboard security devices pull firmware updates from Transaction System. • Microsoft Windows 2008 R2 - support the latest OS technology. • NCR RealPOS 25 - the device model number is available as a selection in the POS Detail when configuring a register. • Oracle 11g R2 - support the latest database technology. • Oracle Port Enhancement - Port 1521 not required for Oracle communications. • Oracle Enterprise Manager (OEM) - database troubleshooting tools and backup. • POS ID - view the POS ID within the POS Detail UI without hovering the mouse over the POS Name data field. • Reuse Delay - a time waiting period for re-using an access plan or board plan. • Stored Value Priority Order Tax - applied to individual SV Accounts specified in priority order. Only applicable at the NCR POS Client. • Stored Value Transaction Limit - transaction constraints which dictate how much money can be spent in a specified time period. Transaction constraints on how many times a card can be used in a specified time period. • Customer Import Tool Board Plan Enhancement - Customer Import Tool contains the same Multiple Board Plan function in Building Blocks Manager 3.7 SP 1. • TS Tools Boolean Logic - tools contain filter boolean logic.
	3.9.01	5/20/12	<ul style="list-style-type: none"> • Stored Value Account Type Daily Reconciliation Report - End of Day date time does not match system End of Day time. • TS-13566 Transfer meals incremented with original starting count for the period. • TS-13526 Oracle CPU 5 – critical Patch Update April 2012
	3.9.1.0	7/23/12	<ul style="list-style-type: none"> • Audible Alert - a definable audible alert sounds for all Active AND Not Acknowledged alarms until the alarm is Acknowledged or no longer Active. • Customer Transaction History on the Customer Detail Screen - Transaction History for a customer can now be viewed on the Customer Detail record.
	3.9.2.0	9/5/12	<ul style="list-style-type: none"> • Oracle Critical Patch Update (CPU) July 2012 - installed as part of this upgrade. If the client is using a two server configuration, the 32-bit patch (Patch 7, p14095819_112030_WINNT) needs to be applied to the Oracle Client installed on the server that hosts Building Blocks Manager. • MF4100 Laundry Client - added LWIStats (Wireless) to web browser. • Twenty-five (25) issues resolved.
	3.9.2.1	10/31/12	<ul style="list-style-type: none"> • Six (6) Resolved Issues.
	3.9.3.0	01/18/13	<ul style="list-style-type: none"> • Autonomous Event - the Blackboard POS Client on MF4100 device includes Autonomous Event. A privileged cashier can set the device for unattended event entry, preventing non-authorized users from changing the event or device settings.

Table 1-1: Previous Release Notes Reference

Release	Point Release	GA Date	New Feature
	3.9.3.1	2/11/13	<ul style="list-style-type: none"> Two (2) issues resolved.
3.10		11/30/12	<ul style="list-style-type: none"> Persona Integration - administrative, management, and monitoring of Persona (Assa Abloy IP-enabled) locksets within the Transact console. AD300 IR Locks - AD300 IR lock support. The AD300 lock connects directly to the Blackboard Master Controller via RS485, eight (8) locks per Master Controller. MIFARE Contactless Smart Card Technology - support for MIFARE Classic 1K and 4K contactless credential authentication at Blackboard contactless devices; SE3-RDR-100 Door reader excluded. Blackboard MIFARE Datacard Plugin 1.0 - support for MIFARE Classic 1K and 4K only (not Desfire or Mifare Plus) encodes customer chosen information into the smart card chip in the same manner as they would for mag stripe data. PS4101 Contactless Peripheral - the PS4101 reads Blackboard contactless credentials such as FeliCa or Mifare Classic credentials. Blackboard FeliCa Datacard Plugin 3.0 - allows 3rd Parties to encode data onto a FeliCa credential using a different key from the Bb proprietary keys. Control Totals (MF4100 and NCR) - Control Totals are used to balance cash drawers, track debits and credits, or track discrepancies at a POS device. The Drawer Audit report on the POS device reports control totals. Reuse Violation - a card presented at a Blackboard unattended device; Vending, MF4100 with Copy or Laundry Client has a ninety second hold placed on the card. Autonomous Event - the Blackboard POS Client on MF4100 device includes an Autonomous Event option allowing a privileged cashier to set the device for unattended event entry while preventing non-authorized users from changing the event or device settings. Audible Alarm - a definable audible alert sounds for all Active AND Not Acknowledged alarms until the alarm is Acknowledged or is no longer Active Customer Detail Transaction History - the Transaction History for a customer can be viewed on the Customer Detail record. Reuse Delay in Offline Mode - a time period that a customer must wait before re-using an access plan or board plan works when the device is online or offline.
	3.10.0.1	2/21/13	<ul style="list-style-type: none"> Eighteen (18) Resolved Issues.
	3.10.1.0 R2	4/22/13	<ul style="list-style-type: none"> Cash Tender Rounding Solution - round cash tender type payments, either up or down, to the nearest five-cent increment using Canadian Rounding rules. Perform a Deposit (Post Transaction) - Customer Detail Record - allows an administrator to enter a deposit amount for a customer on the Customer Detail window, and eliminates leaving the Customer Detail Record to make a deposit. Board Transaction - Reverse - reverse a board plan transaction with the Customer Board Transaction Tool or in Board Transaction. MF4100 Turnstile Relay Functionality - triggers a relay to the connected device such as a turnstile with a valid transaction from the MF4100. Ingersoll Rand (IR) Interior Push Button Feature on Door Locks - enables an existing push button on Ingersoll Rand door locks to change the state of a door that is Unlocked to either Controlled, Controlled with Pin, or Locked. Persona Locks Now Support a Card Format Containing Issue Numbers - Persona Locks support one card format, that can include site code and issue number and each lock can support a different card format. Transaction Integration Agent (TIA) 3.0 - Support for Board Plan Count Balance Inquiry - supports the transaction type Count Balance Inquiry that returns the number of meal counts used at the current time and profit center. New Oracle Critical Patch Update (CPU) - a collection of patches for the Transact Oracle database(s) (BBTS, IFMN, IDWorks).
	3.10.1.1	4/30/13	<ul style="list-style-type: none"> One (1) Resolved Issue.

Table 1-1: Previous Release Notes Reference

Release	Point Release	GA Date	New Feature
	3.10.2	6/6/13	<ul style="list-style-type: none"> • MIFARE DESFire EV1 - Blackboard Transact supports the MIFARE DESFire EV1 Contactless credential authentication at Blackboard Contactless devices, SE3-RDR-100 Door reader and PS 4100 excluded. <ul style="list-style-type: none"> • The plugin can encode customer chosen information into the smart card chip in the same manner as they would for mag stripe data. • Blackboard Contactless Configuration Manager 1.1 - the Blackboard Contactless Configuration Manager was updated with the following changes: <ul style="list-style-type: none"> • Version change from 1.0 to 1.1, added version to title bar. • Added checking in the UI to not allow skips in sector/AID search order. • Enabled DESfire Application ID search order (and write to config card). • Deleted Mifare Classic Mini sector search order. • PS4101 Configuration Utility 1.1 - <ul style="list-style-type: none"> • Version change from 1.0 to 1.1, added version to title bar. • Added 100ms Delay key to Output Formatting. • Added Key: text boxes for Mifare Classic/DESfire sector search orders (only allowed when Read Card Data is set to From Bb 3rd Party Area). • Added checking in the UI to not allow skips in sector/AID search order. • Transact API - Transact API (Application Programming Interface) allows Blackboard SP to access data and submit stored value transactions against an on-premise Transact instance. <ul style="list-style-type: none"> • Sites using eAccounts - when the site upgrades to 3.10 SP2 External Client and Transact API will both be installed and running as a Windows service. • Transact is a closed API. It currently can only be used by Blackboard. It cannot be used by customers or third party partners at this time. • Uses port 443 on the Blackboard Application Server.
	3.10.2.1	8/28/13	<ul style="list-style-type: none"> • Eleven (11) Resolved Issues.
	3.10.3		<ul style="list-style-type: none"> • SA3032 Door Controller Enhancements - the LEDs on the SA3032 Door Controllers momentarily display door controller address at power up and following an address switch change. • VR41XX And MF41XX Enhancements - WiFi connectivity and signal strength can be seen on each device: <ul style="list-style-type: none"> • VR41XX, it is shown on the Status tab of the service card menu. • MF4100, it is shown on network settings page of the service card menu. • On both the VR41XX and the MF4100, on the web server WiFi Status page (under Monitor), and running the Wifistatus command on the config port. • Persona Enhancements - Persona Access Point Serial Number is editable so that Access Point History is retained when changing hardware. Users can clear and reload a Persona Access Point without clearing/reloading the DSR Service.

Table 1-1: Previous Release Notes Reference

Release	Point Release	GA Date	New Feature
3.11		11/22/13	<ul style="list-style-type: none"> • Credit Card Processing Method - Direct To Payment Gateway - send credit card transactions directly from a Blackboard device to the Blackboard Payment Gateway, bypassing the Blackboard Transact server. <ul style="list-style-type: none"> • Direct to Payment Gateway; the credit card transaction is sent from the device directly to the Blackboard Payment Gateway. • Bb Payment Gateway Host; The device sends the credit card transaction to the Blackboard Transact server, then to the Blackboard Payment Gateway. • Credit Card Payment Gateway - the Payment Gateway settings are on the Credit Card Payment Gateway window. • Credit Card Store Detail, Transact System Options, Credit Card Store Detail: <ul style="list-style-type: none"> • Test Host Connection - previously Test - validates the connection from the Blackboard Transact System Server to Blackboard Payment Gateway. • Test Direct to Gateway - validates the connection from the device to the Blackboard Payment Gateway. • View Payment Gateway Log - transactions sent to and from the Blackboard Payment Gateway. • Customer Detail Record - Transaction History - shows Denied stored value transactions. The user options are All, Valid, or Denied transactions. • Device Diagnostic Log - a logged Device Diagnostic Message. • Ingersoll Rand AD-Series (300 and 400) Push Button LED - pressing and releasing the IPB (Interior Push Button) makes the LED's on the lock flash. • NCR Point of Sale (POS) Register Image - the POSReady 2009, operating system and replaces the current register image OS (Windows XP). <ul style="list-style-type: none"> • Replaces Windows XP (End-Of-Support in 2014), supported into 2022 • Requires .Net 4.0 - included with the register image • NCR POS Register Update - POS Register Update file (NCR register configuration file) on any location, not just an external drive. • Persona New Features - support for DSR 4.0, support up to 1024 Persona locks (Access Points) per DSR. The DSR will not allow more than 1200 users. • Reporting - Stored Value Account Balance -Summary and Detail New Reports <ul style="list-style-type: none"> • Stored Value Account Balance Summary provides data for each account. If more than one account is selected a total for all accounts is also provided. • Stored Value Account Balance Detail breaks out the stored value account data by merchant and each profit center in the merchant. • The Stored Value Transaction by Location and Customer reports include two new columns: Denied Message and Transaction Status. • Customer Defined Fields (CDF) - CDF were added to Customer Filters; all CDF's not just the predefined CDF's like in 3.10 and earlier. <ul style="list-style-type: none"> • CDF can be added to reports: Customer List and Customer Photo Roster • Retail Transaction - use Retail Transaction to perform or view a transaction for a customer at a workstation. This feature includes Denied transactions in the Query; you can also query on only Denied, or Valid separately. • Blackboard Transact Documentation Changes - the Administration Guide reflects a way to use the menus rather than the alphabetical order. • Workflows - each workflow details the CORE setup steps, steps unique to each workflow topic, and reference materials not local to the guide.

RELEASE 3.11 NEW FEATURES

CREDIT CARD PROCESSING METHOD - DIRECT TO PAYMENT GATEWAY (NEW)

- Send credit card transactions directly from a Blackboard device to the Blackboard Payment Gateway, bypassing the Blackboard Transact server.
- Blackboard supports two credit card processing methods:
 - Direct to Payment Gateway
 - The credit card transaction is sent from the device directly to the Blackboard Payment Gateway.
 - Bb Payment Gateway Host
 - The device sends the credit card transaction to the Blackboard Transact server, and then to the Blackboard Payment Gateway.
- The Direct to Payment Gateway option is now on the Credit Card Processing Method drop-down for the following POS Types:
 - Transaction Terminal (MF41xx) with PDS client only (Copy and Laundry Clients do not support credit card functionality)
 - NCR Register
 - Account Management Center (PHIL)
 - Vending Reader (VR4100/VR4101)
 - Workstation
- Credit card processing method is defined **per device**, so a site can use a mix of Direct to Gateway or Bb Payment Gateway Host to process credit card transactions.
 - Allows sites to change the credit card processing method on a schedule/plan best for their environment.
- The credit card processing method is defined under **Transaction System Option > POS > [Device] Credit Card Processing Method**.

Note: Blackboard does not yet support point to point (P2P) encryption as qualified by PCI-DSS. Direct to Payment Gateway is intended to be an initial step toward that goal.

Figure 1-1 Transaction Terminal Detail - Credit Card Processing Method

Blackboard
transaction System

Search

User: it
Merchant: Main Hall Merchant
Profit Center: Breakfast

Transaction Terminal Detail

POS Name: Profit Center: Credit Card Processing Method: Credit Card Store:

POS Type: POS Group:

Terminal Setup

Terminal Type: Connection Type: Host Connection:

Transaction Options

POS Option: Transaction Terminal Setup Option:

Device Configuration

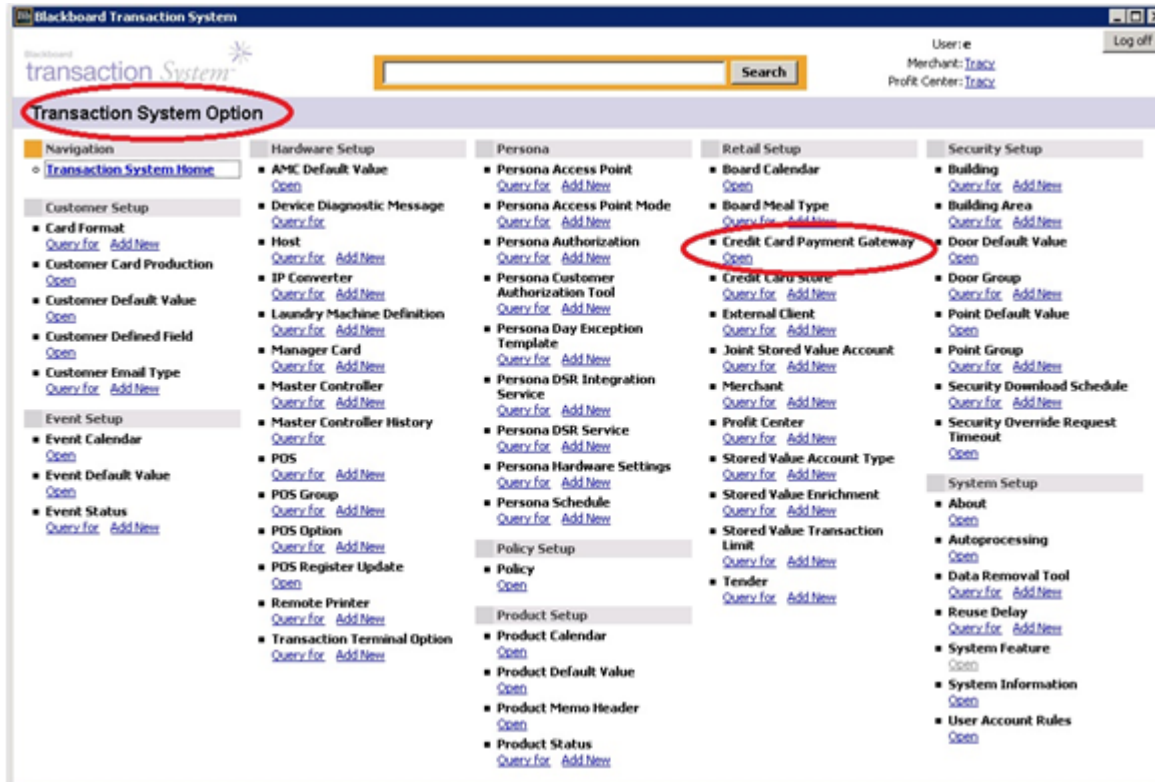
☒ Use Printer
☐ Use Cash Drawer
☐ Turnstile Relay Enabled
☐ Card Utility Function Enabled

- The upgrade to 3.11 will not change the credit card processing method. All Blackboard device settings for credit card processing will remain defined as Bb Payment Gateway Host.
- NCR Registers running the Blackboard Point of Sale software must be updated with the 3.11 register image version.
 - Direct to Payment Gateway will not work on an NCR register if the NCR register image is not updated.
- Confirm Port 11500 is open for credit card processing - refer to the IT Implementation Guide.
- After changing the Credit Card Processing Method to Direct to Payment Gateway for the device, the device must be refreshed:
 - Account Management Center (PHIL) and Vending Reader (VR4100/VR4101) - start the Host Monitor **Transaction System Home > Application > Host Monitor** and refresh the reader.
 - MF4100 - Select the **Refresh POS** button on the device
 - NCR Register -
 - 1.Re-image the register
 - 2.Change the credit card processing method
 - 3.Close and reload the register program
 - a.**Important** - If you do not close and reload the register program, the register will not process credit cards through the Direct to Payment Gateway. The credit cards will continue to be processed by the Bb Payment Gateway Host.

- **Credit Card Payment Gateway**

- The Payment Gateway settings have been removed from the Transact System Options, Host window and moved to the new Credit Card Payment Gateway window under **Transaction System Option > Credit Card Payment Gateway**.
 - The 3.11 upgrade automatically moves the data to the new screen.
 - User Group privileges must be granted to this new task.

Figure 1-2 Transaction System Option Page - Credit Card Payment Gateway



- **Credit Card Store**

A Credit Card Store is a connection to the Bb Payment Gateway, and must be setup to process credit card transactions. The Credit Card Store provides the rules for the Authorization Settlement.

- New **Credit Card Store Detail > Actions** on the Transact System Options, Credit Card Store Detail window:
 - **Test Host Connection** - previously called Test - makes sure there is a connection from the Blackboard Transact System Server to Blackboard Payment Gateway.
 - **Test Direct to Gateway** - makes sure there is a connection from the device to the Blackboard Payment Gateway.
 - **View Payment Gateway Log** - transactions sent to and from the Blackboard Payment Gateway.
 - Query on POS Name, Date, and type of response (all, approved, bad Format, Declined, or Error).
 - Query results are sorted by date order.
 - The query results can be sorted by each column, by clicking the column header.

Figure 1-3 Credit Card Store Detail - Actions Pane Options

Credit Card Store Detail

Credit Card Store Setup

Name: Food Court

Client ID: 2

User: James Smith

Mode: Production

Password: ****

Location: On Premises

Confirm: ****

Currency: US Dollar (840)

☐ Enable Fraud Screening

Actions

- [Test Host Connection](#)
- [Test Direct To Gateway](#)
- [View Payment Gateway Log](#)

Note: If setting up Credit Card Processing for the first time refer to the Blackboard Transact System Administration Guide (Doc PN 1257) for complete instructions.

CUSTOMER DETAIL RECORD - TRANSACTION HISTORY

- Now shows Denied stored value transactions. The user options are All, Valid, or Denied transactions.
- New column added - Denied. If the transaction is denied this column has Yes or No for the status.
- Now has a date filter: All, Last Hour, Today, Current Week, Two Weeks, Current Month, Yesterday, Last Week, Last Month, or a specific date range.
- **Transaction System Home > Customer > [Customer] > Show Transaction History**

Figure 1-4 Customer Transaction History - Accepted and Denied Transaction

Customer Transaction History for Smith, George G # 000000000000101010101

Trans. Type	Trans. #	Denied	Trans. Date/Time	Location	POS Name	Amount	Offline
Denied	12	Yes	08/26/2013 03:21:17 PM	Breakfast	TSDV-DOC-310		
Denied	12	Yes	08/26/2013 03:21:16 PM	Breakfast	TSDV-DOC-310		
Denied	1	Yes	08/26/2013 03:20:40 PM	Breakfast	TSDV-DOC-310		
Deposit	2		08/19/2013 11:55:51 AM	Breakfast	TSDV-DOC-310	\$5000.00	

Close Denied ☒ All ☐ Yes ☐ No Date Filter Two Weeks Print

- Users can now click the Transaction Number to see details of the transaction.

Figure 1-5 Retail Transaction Detail

Retail Transaction Detail

Actual Size

Denied Transaction Details

Information

Transaction Number 2

Actual Date/Time 08/26/2013 03:21 PM

Card Number 000000000000101010101

Profit Center Breakfast

POS Name TSDV-DOC-310

Tender Breakfast Cash

Avail. Balance <None>

Online Transaction ☒

Denied Reason No allow or deny status in policy

Close

DEVICE DIAGNOSTIC MESSAGE

Use the Device Diagnostic Message log and the Host Monitor to display captured messages from various devices however they display the messages differently. The Host Monitor displays messages as they happen while the Device Diagnostic Message is a permanent record.

The Host Monitor scrolls messages temporarily on a monitor and does not contain all the information displayed in the Device Diagnostic Message that is a permanent record of the events. Use the Host Monitor to view recent events as they scroll on the screen and use the Device Diagnostic Message to view complete historical information.

- A device sends a Device Diagnostic Message that is logged. Select the message to display more data.
- Some types of messages in this are:
 - **AC3000/AC3100:**
 - Purchase card problems (card not taken, card not swiped, no account for card, etc). These result in money being collected by the AC3000/AC3100 without being deposited to a SV Account
 - Peripheral status (printer low or out of paper, card dispenser empty, bill acceptor full)
 - Peripheral issues (communication issues, timeouts)
 - **SA3032:**
 - Peripheral issues (door controller communication lost/ok, card reader communication lost/ok, card reader programming issues)
 - **Laundry:**
 - Peripheral issues (LCM20 communication lost/ok, wireless laundry diagnostics messages)
- In addition to the query for Merchant, Reader Type Device Name, or Log Message, you can now query (under the Date option) for:
 - All
 - Last Hour
 - Today
 - Current Week
 - Two Weeks
 - Current Month
 - Yesterday
 - Last Week
 - Last Month
 - Specify Date/Time Range:
 - Click a Start Date/Time on the calendar
 - Click an End Date/Time on the calendar

Transaction System Option > Hardware Setup > Device Diagnostic Message

Figure 1-6 Device Diagnostic Message

Query for Device Diagnostic Message

Date

Merchant

Reader Type

Device Name

Log Message

All

...

Run Query

Items 1-20 of 22,491

< Prev

1

2

3

112

225

338

450

562

675

788

900

1,012

1,125

Next >

	Date	Merchant	Reader Type	Device Name	Log Message
Select	08/23/2013 10:29 AM	Burger World	POS	TOM AMC	Door opened
Select	08/23/2013 10:29 AM	Burger World	POS	TOM AMC	Power up
Select	08/23/2013 09:47 AM	Burger World	POS	TOM AMC	Power up
Select	08/23/2013 09:47 AM	Burger World	POS	TOM AMC	Door opened
Select	08/23/2013 09:42 AM	Burger World	POS	TOM AMC	Power up
Select	08/23/2013 09:42 AM	Burger World	POS	TOM AMC	Door opened
Select	08/23/2013 09:39 AM	Burger World	POS	TOM AMC	Door opened
Select	08/23/2013 09:39 AM	Burger World	POS	TOM AMC	Power up
Select	08/22/2013 09:40 AM	<None>	MasterController	John's MC 17-00	DC 0 Comm Ok
Select	08/21/2013 04:06 PM	<None>	MasterController	John's MC 17-00	WAPM 1 Tamper
Select	08/21/2013 04:06 PM	<None>	MasterController	John's MC 17-00	WAPM 0 AA Battery 5.17 V
Select	08/21/2013 04:06 PM	<None>	MasterController	John's MC 17-00	WAPM 1 AA Battery 5.23 V
Select	08/21/2013 04:06 PM	<None>	MasterController	John's MC 17-00	PIM 0 Comm Ok for WAPM 0
Select	08/21/2013 04:06 PM	<None>	MasterController	John's MC 17-00	PIM 0 Comm Ok for WAPM 1
Select	08/21/2013 03:36 PM	<None>	MasterController	John's MC 17-00	WAPM 1 Tamper
Select	08/21/2013 03:35 PM	<None>	MasterController	John's MC 17-00	WAPM 1 AA Battery 5.23 V
Select	08/21/2013 03:35 PM	<None>	MasterController	John's MC 17-00	WAPM 0 AA Battery 5.17 V
Select	08/21/2013 03:35 PM	<None>	MasterController	John's MC 17-00	PIM 0 Comm Ok for WAPM 0
Select	08/21/2013 03:35 PM	<None>	MasterController	John's MC 17-00	PIM 0 Comm Ok for WAPM 1
Select	08/21/2013 03:32 PM	<None>	MasterController	John's MC 17-00	WAPM 1 Tamper

Items per Page: 20.

< Prev

1

2

3

112

225

338

450

562

675

788

900

1,012

1,125

Next >

Close

INGERSOLL RAND AD-SERIES (300 AND 400) PUSH BUTTON LED

- The Ingersoll Rand Interior Push Button feature was originally released in 3.10 SP1. Refer to the Blackboard Transaction 3.10 Service Pack 1 Release Notes.
 - Pressing and releasing the IPB (Interior Push Button) will make the LED's on the lock flash. This LED feature is new for 3.11.

NEW NCR POINT OF SALE (POS) REGISTER IMAGE

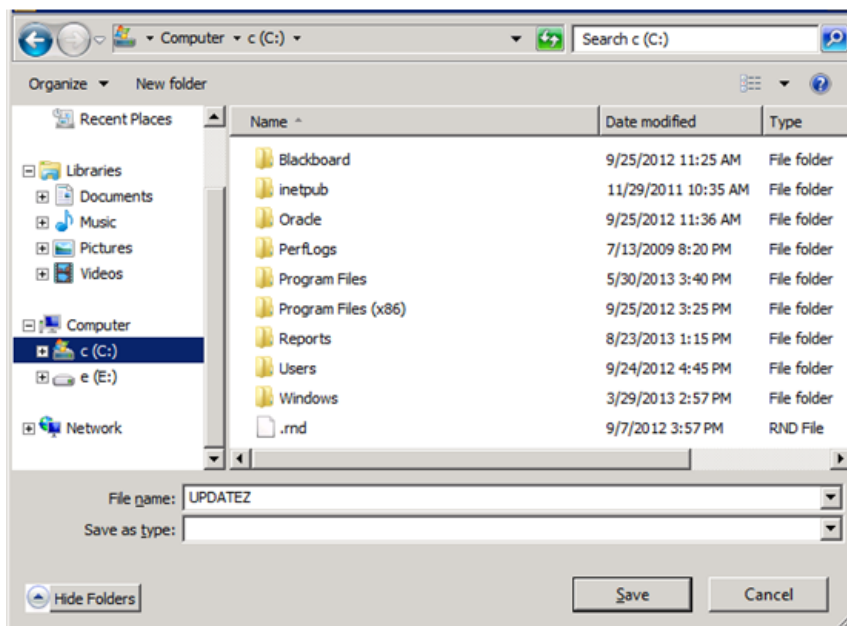
- Includes the POSReady 2009, operating system and replaces the current register image operating system (Windows XP).
 - Replaces Windows XP scheduled for End-Of-Support in 2014
 - Supported into 2022
 - Optimized for Point of Sale (POS) solutions
- Requires .Net 4.0 - included with the register image
- Refer to the POS Installation Guide (Doc PN 1463) for the process to obtain a new register image and re-image instructions.

NCR POS REGISTER UPDATE

- Now you can place the POS Register Update file (NCR register configuration file) on any location, not just an external drive. If an external device is plugged in it becomes the default, but you can still store the file elsewhere.
- A Windows Explorer window opens to allow the user to specify the full destination.

Transaction System Option > Hardware > POS Register Update

Figure 1-7 Choose a Destination Directory



PERSONA

New Features

- Support for DSR 4.0
 - Ability to Support up to 1024 Persona locks (Access Points) per DSR.

A Note on Limitations

- Support of Authorizations with greater than 1200 Users
 - The DSR will not allow a user to create or modify an authorization to contain more than 1200 users.
 - An Authorization with greater than 1200 users will result in an error message from DSR.
- An authorization is similar to a door access plan; if you add more than 1200 cardholders to an authorization and push it to the DSR, the request will be rejected.
- This is a limitation of the Persona DSR software along with the physical database hardware on the locks.

Figure 1-9 Stored Value Acct Balance Summary Report

Stored Value Account Balance Summary Report	
Summary	From: 2013-01-01 02:00:00 To: 2014-01-02 01:59:59
- Account Totals -	
Opening Account Balance:	\$ 0.00
Deposits:	\$ 51,483.01
Withdrawals:	\$ 303.20
Transfers:	\$ 0.00
Resets:	\$ 0.00
Enrichments:	\$ 5,642.20
Closing Account Balance:	\$ 0.00
Variance:	-\$ 61,535,963.26
Stored Value Account Type #1	
Opening Account Balance:	\$ 0.00
Deposits:	\$ 50,091.01
Withdrawals:	\$ 219.35
Transfers:	-\$ 60.00
Resets:	\$ 0.00
Enrichments:	\$ 640.00
Closing Account Balance:	\$ 0.00
Variance:	-\$ 52,545,989.16
Stored Value Account Type #2	
Opening Account Balance:	\$ 0.00
Deposits:	\$ 1,392.00
Withdrawals:	\$ 83.85
Transfers:	\$ 60.00
Resets:	\$ 0.00
Enrichments:	\$ 5,002.20
Closing Account Balance:	\$ 0.00
Variance:	-\$ 8,989,974.10

Note: When running this report on the initial (first day) or the day of the upgrade, there will be a variance because there is no data from the day before to compare. The second day the report is run, is accurate and if there is a variance it is valid. This applies to both the Detail and Summary reports.

- Both reports are available in CSV (Comma Separated Value) format as shown below:

Figure 1-10 Stored Value Account Balance Detail Report CSV

	A	B	C	D	E	F	G	H	I	J
1	BusinessC	BusinessDateEnd								
2	#####	#####								
3										
4										
5										
6	SvAccount	BalanceO	Deposits	Enrichme	Resets	Transfers	Withdraw	BalanceCl	BalanceVariance	
7	Stored Va	0	50091.01	640	0	-60	212	0	-5.3E+07	
8	Stored Va	0	1392	5002.2	0	60	83.85	0	-8989974	
9										
10										
11										
12										
13										
14	Deposits									
15	SvAccount	ProfitCen	PosName	TodayAm	OfflineAn	InvalidAm	TotalAmount			
16	Stored Va	Cor	DCLARK	50000	0	0	50000			
17	Stored Va	Cor	TOM AMC	8.93	0	0	8.93			
18	Stored Va	Cor	WNIELSEN	34	0	0	34			
19	Stored Va	Cor	eXternal F	8.08	0	0	8.08			
20	Stored Va	Cor	Jeff Unen	20	20	0	40			
21	Stored Va	Cor	DCLARK	1050	0	0	1050			
22	Stored Va	Cor	Kendall's	70	0	0	70			
23	Stored Va	Cor	Dave's PO	120	0	0	120			
24	Stored Va	Cor	Dave's MF	152	0	0	152			
25										
26										
27										
28										
29										
30	Enrichments									
31	SvAccount	ProfitCen	PosName	TodayAm	OfflineAn	InvalidAm	TotalAmount			
32	Stored Va	Cor	DCLARK	525	0	0	525			
33	Stored Va	Cor	Kendall's	25	0	0	25			
34	Stored Va	Cor	Dave's PO	40	0	0	40			
35	Stored Va	Cor	Dave's MF	50	0	0	50			
36	Stored Va	Cor	DCLARK	5000	0	0	5000			
37	Stored Va	Cor	WNIELSEN	2.2	0	0	2.2			
38										
39										
40										
41										
42										
43	Resets									
44	SvAccount	ProfitCen	PosName	TodayAm	OfflineAn	InvalidAm	TotalAmount			

Stored Value Denied Transactions

- Denied Stored Value Transactions are now captured by Transact.
- Denied Stored Value Transactions can be seen in:
 - Stored Value Transaction by Location
 - Stored Value Transaction by Customer
 - Customer detail transaction history
 - Retail Transactions
- The Stored Value Transaction by Location and Customer reports now includes two new columns:
 - Denied Message
 - Transaction Status
 - Any saved reports will have all transactions returned.
 - The two new columns must be added to the saved report to display.

Note: For a site that upgrades to 3.11 - Stored Value Transaction by Customer and Location reports default with all transactions and contain the Reason and Transaction Status columns.

Customer Defined Fields (CDF)

- CDF were added to Customer Filters are on the reports below; all CDF's not just the predefined CDF's like in 3.10 and earlier:

<ul style="list-style-type: none"> Board Plan Meal Allowed by Customer Board Plan Meal Balance by Customer Board Plan Meal Use by Customer Board Plan Transaction by Customer Board Plan Zero Use by Customer Card Number by Customer Customer List Customer Photo Roster Customer Transaction Log Door Access Plan Override by Customer 	<ul style="list-style-type: none"> Door Access Transaction by Customer Event Allowed by Customer Event Transaction by Customer Stored Value Account Balance by Customer Stored Value Transaction by Customer Stored Value Transaction by Location Stored Value Transaction Limit by Customer Stored Value Transaction Summary by Customer Stored Value Zero Use by Customer
--	--

- CDF can be added as Columns in the following reports:
 - Customer List
 - Customer Photo Roster
- CDF data is the value of the CDF when running the report.**

- Adding new CDF's – there is now an option to select the **Include in Reporting** check box.

Figure 1-11 Customer Defined Field - Include in Reporting (check box)

Customer Defined Field

Customer Defined Field Type
Group

Caption
Student Class

☒ Store Per Transaction
☒ Include In Reporting

Group Items

- Freshmen
- Sophomore
- Junior
- Senior

Add Remove Properties

OK Cancel

- To include a CDF as a customer filter or column for a report the CDF must be:
 - Type:
 - Boolean
 - Dollar
 - Group
 - Numeric
 - String
 - Text type fields are not supported.
 - **Important** - If the Text type is used, the option for **Include in Reporting** is greyed out and not available.

Figure 1-12 Include in Reporting - Not Available

Customer Defined Field

Customer Defined Field Type
Text

Caption
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

☐ Store Per Transaction
☒ Include In Reporting

Max Length
0

- CDF names cannot be more than 28 characters in length.
- Up to 999 CDF's can be defined as filters or columns.

- The CDF Name can only include the following characters:
 - 0-9
 - A-Z
 - a-z
 - \$
 - Space
 - Underscore

Note: If a character that is not in the above list is included in the Caption name, and the **Include in Reporting** check box is selected you will receive a warning message as shown below. To fix this error you must either uncheck the **Include in Reporting** check box or remove the Caption name character that is not included in the list.

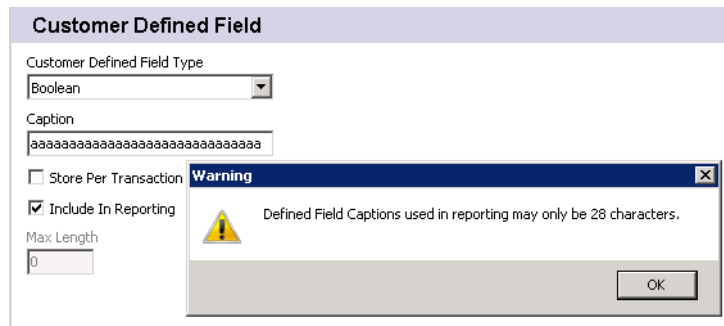
Figure 1-13 Customer Defined Field - Non Approved Character Warning Message

The screenshot displays the 'Customer Defined Field' configuration window. The 'Customer Defined Field Type' is set to 'Boolean'. The 'Caption' field contains '*test'. The 'Store Per Transaction' checkbox is unchecked, and the 'Include In Reporting' checkbox is checked. A red rectangle highlights the 'Include In Reporting' checkbox. A warning dialog box is overlaid on the form, titled 'Warning', with a yellow warning icon. The message in the dialog reads: 'Defined Field Captions used in reporting may contain only [0-9,A-Z,a-z,_,\$,SPACE] and must start with a letter.' An 'OK' button is visible at the bottom right of the warning dialog.

CAPTION FIELD TEXT CONSIDERATIONS

- The input length of the Caption name field is 30 characters.
- The longest Caption name for Import into Reporting is 28 characters.
- If the Caption name exceeds 28 character, and the Include in Reporting check box is checked, you will receive the following error:

Figure 1-14 Customer Defined Field - Caption Name Exceeds 28 Characters Warning



Note: If you have pre-existing CDF's with more than 28 characters in the Caption name, go to the Customer Defined Field window in the Transaction System and revise the name to less than or equal to 28 characters. You can then check Include in Reporting (provided it meets the criteria).

- **3.11 Upgrade** – if the CDF meets the requirements it is added as an optional Customer Filter in the Transact Reporting System.

Note: If the number of Customer Defined Fields that meet the criteria should exceed the upper limit, go into the Customer Defined Fields form and uncheck the **Include in Reporting** check box and then check the box for the CDFs you want to include.

Note: Blackboard Customer Support has a tool that will be run during your 3.11 upgrade preparation time, to determine if a CDF Name that doesn't meet the required constraints above. If a CDF Name does not meet the constraints the tool reports the CDF field. The customer has the option to change the name. If the name is not changed this field will not be a filter or column option for the report.

Figure 1-15 Customer List with CDF (Customer Defined Fields)

Customer List [12:12] [8/27/2013 12:21:04 PM]						
Customer Number	First Name	Customer Active	Customer Primary Card Number	Birthdate	Gender	Lives on Campus
000000000000000000000004	Marry	Active	00000000000000000000011136	n/a	Female	T
000000000000000000000001	John	Active	0000001234567890123456	n/a	Male	T
000000000000000000000002	Larry	Active	000000000000000000000002	n/a	Male	T
0000000000000000000000021	Hector	Active	0000000000000000000000021	n/a	Male	T
000000000000000000000005	Rose	Active	0000000000000000000000051	n/a	Female	T
000000000000000000000009	Jim	Active	000000000000000000000009	n/a	Male	T
0000000000000000000000041	Margarita	Active	0000000000000000000000041	n/a	Female	T
0000000000000000000000042	Sam	Active	0000000000000000000000042	n/a	Male	T
0000000000000000000000055	Chris	Active	0000000000000000000000055	n/a	Male	T
0000000000000000000000014	Sandra	Active	n/a	n/a	Female	T

RETAIL TRANSACTION

- Use Retail Transaction to perform or view a transaction for a customer at a workstation. Transaction Types include: Adjust Stored Value Account Balance to Specified Amount, Retail Return, Retail Sale, Stored Value Deposit, or Stored Value Deposit Return.
- This feature now includes Denied transactions in the Query; you can also query on only Denied, or Valid separately.
- **Transaction System Home > Retail > Retail Transaction > Query**

Figure 1-16 Query for Customer Transaction - Showing Denied Transactions

Query for Customer Transaction View by Profit Center

Trans. #	Denied	Trans. Time	Profit Center	POS Name	Type	Tender(s)	Amount	
	<All>	All	Breakfast					Run Query

Items 1-4 of 4

Trans. #	Denied	Trans. Time	Profit Center	POS Name	Type	Tender(s)	Amount	Offline
Select 1	<input checked="" type="checkbox"/>	08/26/2013 03:20 PM	Breakfast	TSDV-DOC-310				<input type="checkbox"/>
Select 12	<input checked="" type="checkbox"/>	08/26/2013 03:19 PM	Breakfast	TSDV-DOC-310	Sale			<input type="checkbox"/>
Select 7	<input type="checkbox"/>	08/19/2013 11:55 AM	Breakfast	TSDV-DOC-310	Sale	Cash	\$5,000.00	<input type="checkbox"/>
Select 5	<input type="checkbox"/>	08/19/2013 11:54 AM	Breakfast	TSDV-DOC-310	Sale	Cash	\$10.00	<input type="checkbox"/>

BLACKBOARD TRANSACT DOCUMENTATION CHANGES

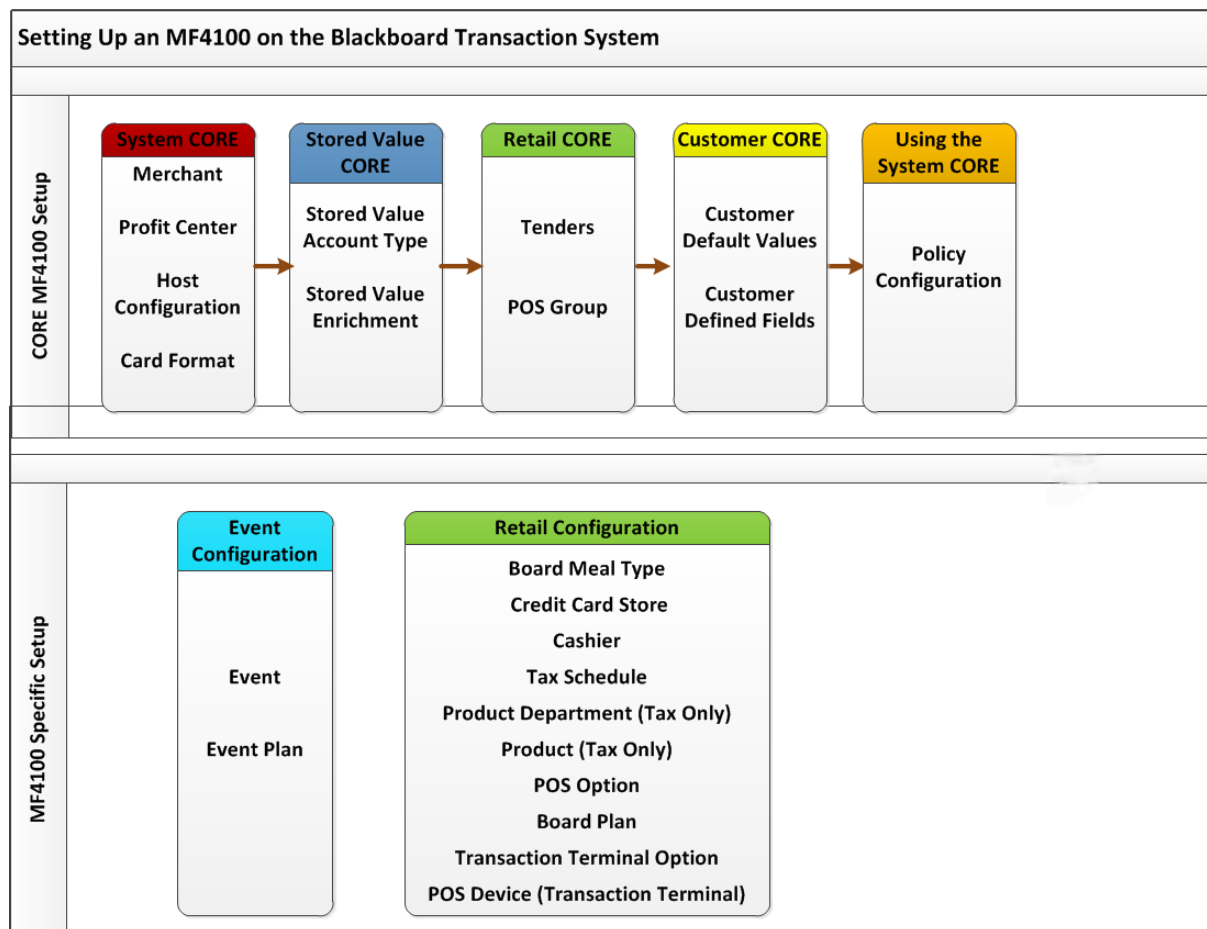
Note: Considering the major changes in the documentation, if you should have any questions, comments, or suggestions, please contact tracy.sibley@blackboard.com.

- **New System Administration Guide Layout and Features**

The administration guide has been modified to reflect the way someone might use the different menus rather than being in alphabetical order as previously presented. Any setup options that are not in the CORE System Setup chapter are now included in with topic chapter, for example if a topic was formerly in Customer Setup and is not currently used in the System Setup chapter, it is located in the Customer chapter. The new chapters contain the former setup tasks specific to the topic and the general tasks for the topic. The new chapters in the Blackboard Transact System Administration Guide include:

- **Overview** - a brief review of the new features and Blackboard Transact System requirements.
- **Navigation** - Access to all chapters and Appendix sections, including the new PDF navigation reference and general navigation explanations.
- **System Setup** - This is the suggested path to set the CORE structure for basic functionality in the Transact System, for example Merchant, Host, and Profit Center.
- **Customer** - Customer related task specific setup and tasks pertaining to Transact System customers.
- **Event** - Event related task specific setup and tasks pertaining to Transact System events.
- **Retail** - Retail information, transactions, POS, products, product and retail specific task setup.
- **Security** - Security related task information including doors, points, schedules, and Persona.
- **Stored Value** - Stored Value information including Stored Value Types and Enrichments.
- **Using the System** - This includes for example, Policy, External Client/Transact API, IP Converter, Market Place, and Transaction Integration Agent (TIA).
- **Workflows** - Each workflow details the initial CORE setup steps, steps unique to each workflow topic, and reference materials not local to the System Administration Guide. The workflow topics include:
 - Laundry Reader Setup Workflow
 - Persona Door Swipe Setup
 - Stored Value Transaction Limit Setup
 - AC3000 Setup Workflow
 - Copier Setup Workflow
 - Transaction Terminal Setup Workflow
 - TIA Setup Workflow
 - Vending Reader Setup Workflow
 - VTS (Value Transfer Station) Setup Workflow
 - VX570 Setup Workflow
 - NCR Register Setup Workflow
 - Event Plan Setup Workflow
 - Board Plan Setup Workflow
- The System Setup chapter includes the most basic setup tasks for the Transact System referred to as CORE. Subsequent tasks are reliant on these first steps to fully complete those tasks, or allow access to those steps.
- Other setup steps not included in the System Setup chapter, are key to enable different tasks and are listed as CORE steps in the workflows but pertain to specific tasks, or are CORE to that specific task. Also they are referred to as Task CORE, not System CORE, and in most cases are required.

Figure 1-17 System CORE and Task Specific Example



- All Blackboard Transcript Documents:
 - Documents of similar topics are being combined into one document with multiple topics to facilitate centralizing locating information.
 - New examples and usage cases to help clarify the topic's function.
 - New troubleshooting sections are being added.
 - Hyperlinks provide quick document navigation.

Note: All the above documentation changes are a work in progress and will continue.

ASSOCIATED PRODUCTS AFFECTED

Table 1-2: Associated Products Affected

Title and Description	Benefit	Implementation
<ul style="list-style-type: none">Reporting System	<ul style="list-style-type: none">Business IntelligenceProvides additional data for reconciliation, troubleshooting, and data mining activities.	The reports are available in the Transact Reporting System.

DOCUMENTS CHANGED WITH THIS RELEASE

Table 1-3: Documents Changed in this Release

Document Name	Document Number	Release
Blackboard Reporting System Release 3.11 Guide	1259	3.11
Blackboard Transact IT Implementation Guide using PCI-DSS 2.0 Server Specifications	1407	3.11
Blackboard Transact System Administration Guide	1257	3.11
Building Blocks Manager 3.11 Administration Guide	1459	3.11
Building Blocks Manager 3.11 Administration Guide - Internal	1458	3.11
Building Blocks Manager 3.11 Agent Configuration Guide - Internal	1457	3.11
MF4100 Multi-Function Reader Installation and Administration Guide <ul style="list-style-type: none"> MF41xx was updated with a troubleshooting section. 	1295	3.11
NCR POS Register Installation Guide This new Installation Guide is composed of the following documents: <ul style="list-style-type: none"> NCR RealPOS 72XRT Installation Guide (New) NCR RealPOS 70XRT Register Installation Guide NCR RealPOS 25 Register Installation Guide Reimage an NCR POS Register NCR Matrix Blackboard Transaction System POS Cashier's Guide 	1463 <ul style="list-style-type: none"> 1451 1307 1375 1283 1186 1268 	3.11

KNOWN ISSUES

Table 1-4: Known Issues

Category	JIRA Reference Number	Issue Description Summary
Device	TS-23479	Receipt printers attached to NCR registers print uneven and "jittery" when the register is configured for Direct to Payment Gateway. The printers are NCR 7197 model printers.
Device	TS-23210	When making a Stored Value Deposit at MF4100 the device only displays forty (40) Stored Value Accounts.
System	TS-23664	Direct to Payment Gateway processing may be slow. During Transact 3.11 Beta, USU experienced slowdown when processing credit card transactions using the Direct to Payment Gateway option. Product Development is currently investigating the environment configurations.
System	TS-23667	Stored Value balance inquiries performed through a the Transaction Integration Agent (TIA) are being recorded as a Denied Stored Value transaction when the account has a zero balance.
System	TS-23471	Credit Card Reconciliation Tool freezes, does not continue processing, and does not return to the opening query.
System	TS-23024	After a transaction, the POS Tab is not updating in the Host Monitor. The work around is to restart the Host Monitor.

RESOLVED ISSUES

Table 1-5: Resolved Issues

Category	JIRA Reference Number	Issue Description Summary
Device	TS-20860	Credit Card Return Transactions are not being sent to the Blackboard Payment Gateway when the transactions are performed while offline on a POS Register.
Device	TS-20848	When manually adding a Persona Access Point the following error occurs ORA-01400: cannot insert NULL into ("ENVISION"."DSRLOGENTRY"."ORIGINID").
Device	TS-19241	AT3000 produces an Oracle error ORA-06512 when performing a deposit.
Device	TS-18802	The last screen of the VR4100/VR4101 manager card audit process has "Clear," "Cancel," and "Done" buttons. Cancel and Done do the same thing (close out the audit screen). Clear clears the interval totals and closes.
Device	TS-18800	CANCEL button on VR4100/VR4101 now cancels out of the manager card and service card menus.
Device	TS-17353	MF4100 and LC3000 Laundry - Transactions are causing the 90 second reuse to be activated so customer gets reuse violation if attempting a transaction at a different device after doing a laundry transaction.
Device	TS- 17733	MF4100 POS - Unable to communicate with Host prior to obtaining an IP Address.
Documentation	TS-17609	The data dictionary doesn't contain contain definitions for table:column POS_TT.Terminal Type.
Reporting System	TS-18368	Door List Report - selecting Door Name Filter are no longer in alphabetical order.
Reporting System	TS-18339	Scheduled reports are not delivering scheduled reports.
Reporting System	TS-17990	Door Access Transaction by Customer report - Persona Doors only reporting Access Denied.
Reporting System	TS-17219	Retail Stored Value Deposits by Location report shows Count of Stored Value Deposits as currency when output is defined as CSV or PDF.
Reporting System	TS-17178	Machine Collection Report - Columns for 'Collection Datetime' and 'Previous Collection Datetime' as well as 'Manager Card' all show "n/a".
System	TS-21436	Transaction Integration Agent (TIA) does not apply multiple board cash equivalency transactions.
System	TS-21033	MF4100 - POS Client needs to trigger turnstile relay on valid board transactions, not just valid event transactions.

Category	JIRA Reference Number	Issue Description Summary
System	TS-20225	Transaction Integration Agent (TIA) Host crashes when Message length value is NULL.
System	TS-19962	Temp Cards when displayed in "Customer - Assign Temporary Card" is not in any type of sort order and is random.
System	TS-19657	Enhanced Transaction Integration Agent (TIA) Testing and Certification tools.
System	TS-18367	Query for Device Diagnostic Message - Error: Out of memory.
System	TS-18273	An error is now written to the Autoprocessing Log when the Day Start Time does not equal the Next Daily Processing Time.
System	TS-18063	Customer Import Tool does not update "Card Issue Number" when it is the only field that is changed.
System	TS-17737	NCR Register - Drawer Audit Report - Control total displays ##### when amount goes over 1 million.
System	TS-17653	Unable to add new card number through ID Works.
System	TS-17603	External Client - Timeout error when connecting to Oracle db.
System	TS-17460	Stored Value transactions are not being applied to the Stored Value account balance between the time an edit is made in Customer - Stored Value Account Properties and the Apply button is clicked on the Customer Detail page.
System	TS-17389	BbReaders Host crashes.
System	TS-17305	Door Access Plan doesn't check merchant rights before removing a door from the plan.
System	TS-17255	Door not following scheduled behavior when Holiday is applied using "Use the normally scheduled day of week". (v3.11)
System	TS-17236	Board Plans are not following Plan Control Start Date/time and Stop Date/Time.
System	TS-16906	Oracle error ORA-07445 when IDWorks is querying V_IDW_PHOTO, JHU_CUSTOMER_DEFINED_DATA, V_IDW_CUSTOMER.

SYSTEM INFORMATION

This section outlines the server platforms supported by the Transact System. Covered are the supported database and workstation configurations and the compatible software products.

UPGRADE PATH

Table 1-6: Upgrade Path

Publisher	Product Family	Min Version
Blackboard	Transact System	3.10
Microsoft	.NET Framework	4.5

COMPATIBLE HARDWARE PRODUCTS

Table 1-7: Compatible Hardware Products

Blackboard Hardware	Supported in Transact System 3.11	Not supported in Transact System 3.11	Notes
Account Management Center	AC3000 AC3000 via IPC VTS	RDR-E-CMC RDR-E-LOAD	AC3000 via IPC - If using Credit Card this configuration is not supported. If using Banners this configuration is not recommended.
Activity Reader	AT3000, AT4100	AT3000 via IP Converter, MW9000, MW9002	
Authorization Reader		MW9040, MW9042	
Copy Reader	CR1120, CR1122, CR2000, CR2002 CR3000, CR4100 CR3000 via IP Converter MF4100 Copy Client	RDR-E-CR	Account Override functionality is not supported in TS 3.6.
Door Access Reader	SA2000, SA2001, SA2002, SA2003, SA2010, SA2011, SA2012, SA2013, SA2020, SA2021, SA2022, SA2023 via IPC only SA3004 and SA3032 via IP SA3004 and SA3032 via IPC DR4100, DR4200, DR4210	SA1000	Prox readers are not supported on SA20xx readers, only SA30xx.
IP Converter	COM-IPCONV COM-IPCONV2		
Laundry Reader	MW9010, MW9012 LC3000, LC4100 LC3000 via IPC LCM20 MF4100 Laundry Client	RDR-E-LCR04 RDR-E-LCR10 RDR-E-LCR20 RDR-E-MW9012	
Merchant On Point		MOPS	

Blackboard Hardware	Supported in Transact System 3.11	Not supported in Transact System 3.11	Notes
Point of Sale - Blackboard	MF4100 POS Client PS4100 POS Reader		
Point of Sale - MaxiWedge		MW9300, MW9302, MW9340, MW9342, MW9350, MW9352	
Point of Sale - MidiWedge		MW9240, MW9242, MW9250, MW9252	
Point of Sale - MiniWedge		MW9200, MW9201, MW9220, MW9221	
Point of Sale - NCR	7402, 7403, 7443	RDR-E- NCR7453, 7454	Registers not supported in serial communication mode.
Remote Printer	RDR-E-RPRT280 via IP RDR-E-RPRT via Lantronix device, requires COM-E- IPCON100		
Security Monitor Reader		MW9031, MW9032	
Security Multiplexer	SM8		
Serial FDI		FDI's	Vendor must migrate to the Transaction Integration Agent (TIA).
Time Management		MW9020, MW9022	
Transaction Terminal - Dialup	VeriFone Vx570 via Serial TIA	Omni 395, Omni 396, Omni 3200, Omni 3200SE	Compatible terminal software for the VeriFone Vx570 device is required.
Transaction Terminal - IP	VeriFone Vx570 via IP TIA		Compatible terminal software for the VeriFone Vx570 device is required.

Blackboard Hardware	Supported in Transact System 3.11	Not supported in Transact System 3.11	Notes
Vending Reader	VR-SP, VR-MM, VR-MDB, VR-MDB2 VR-MDBMP, VR4100 VR-MDBMP via IP Converter	RDR-E-MDB485 RDR-E-VR RDR-E-VRMDB RDR-E-VRNMDB	
Vending Reader with Interface Module	VR-MFI, VR-MFR		
Wireless Activity Reader		W-ARBW, W-ARCLR, W-BUSRDR	

COMPATIBLE SOFTWARE PRODUCTS

Table 1-8: Compatible Software Products

Publisher	Product Family	Min Version
Blackboard	eAccounts	N/A
Blackboard	Data Integration for Windows (Building Blocks Manager)	3.11
Blackboard	Video Surveillance	4.1.5.30
Select Electronics	ROD Gold (Kitchen Display System for NCR)	4.09

SUPPORTED SERVER INFRASTRUCTURE

Table 1-9: Database

DB Publisher	DB Edition	DB Min Version	DB Data Width	Processor Family	Processor Data Width
Oracle	Standard, Enterprise	11g R2 11.2.03	64bit	x64	64bit

Table 1-10: Internet

Component	Minimum Version
.NET Framework Version	4.5
IIS Version	7.5

PLATFORM

Table 1-11: TSSA - Transact System server application for transaction processing

Publisher	Family	Edition	Min Version	Processor
Microsoft	Windows Server	Standard, Enterprise	2008 R2 SP1	x64

Table 1-12: TSDB - Transact System database for transaction data storage

Publisher	Family	Edition	Min Version	Processor
Microsoft	Windows Server	Standard, Enterprise	2008 R2 SP1	x64

Table 1-13: RSSA - Reporting System server application for analytical processing

Publisher	Family	Edition	Min Version	Processor
Microsoft	Windows Server	Standard, Enterprise	2008 R2 SP1	x64

SUPPORTED CLIENT INFRASTRUCTURE

PLATFORM

Table 1-14: TSCA - Transact System client application for managing TSSA

Publisher	Family	Edition	Min Version	Processor
Microsoft	Windows	Professional	XP SP3	x86
Microsoft	Windows 7	All	SP1	x86, x64
Microsoft	Windows Vista	All	SP2	x86, x64
Microsoft	Windows Server	All	2008 R2	x86, x64

Table 1-15: RSWA - Reporting System web application for managing RSSA

Publisher	Family	Min Version	OS Abbreviation
Microsoft	Internet Explorer	8.0	Any Windows

Table 1-16: NPOS - NCR Point of Sale

Publisher	Family	Edition	Min Version	Processor
Microsoft	Windows	Professional	XP SP3	x86
Microsoft	Windows	POS	POSReady 2009	x86

LOCALE

English (United States)

INSTALLATION/CUSTOMIZATION IMPACT

The following must be considered before installing this product.

Table 1-17: Product Installation Considerations

Notes
The 3.9 upgrade is a high impact as the servers will be flattened so the client/Support should do an extensive inventory of all customization and third party applications to ensure they can be backed-up and re-installed.
All DR4xxx readers need to take a firmware update (new code) after the Master Controller receives new software. Each DR4xxx takes about 4 minutes to update. DR4xxx's on a Master Controller will take approximately 32 minutes to update before all of the DR4xxx's on that controller are fully functional.

IMPORTANT: *The above only applies to sites using a release prior to BbTS 3.9.*
