



Back Office **Till Functions Document**

Version 1.5
Prepared By: Amy Byers
Revision Date: 12/22/2015

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1. Feature Overview

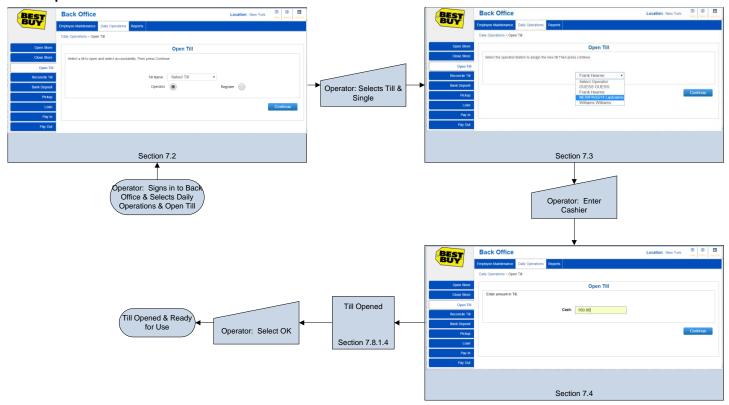
1.1 Feature Description

The Till Functions Feature Document describes the functionality that allows retailers to open and reconcile tills. A till is defined as a removable physical storage box containing money which can be put into or taken out of a physical drawer or other device. In order to use a till, the till needs to be opened, set up financially, and the Point of Sale system needs to be made aware of the till.

2. User Impacts

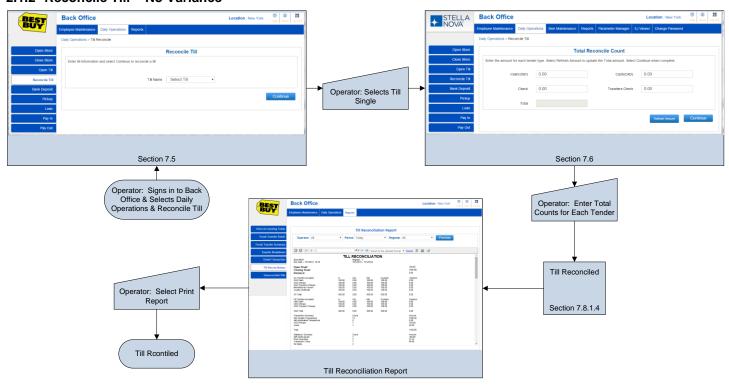
2.1 Screen Process Flow

2.1.1 Open Till

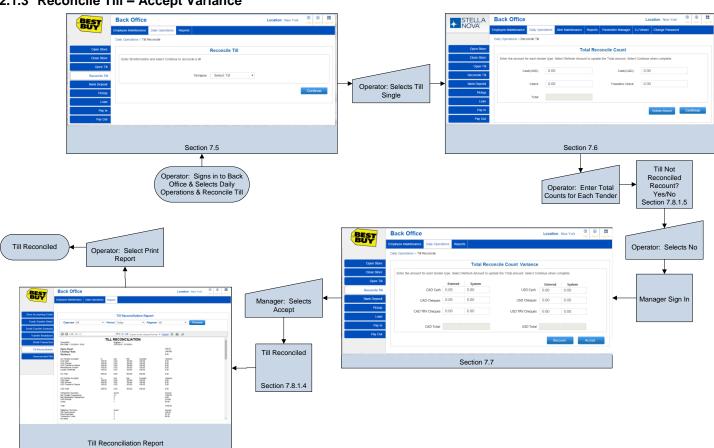


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2.1.2 Reconcile Till - No Variance

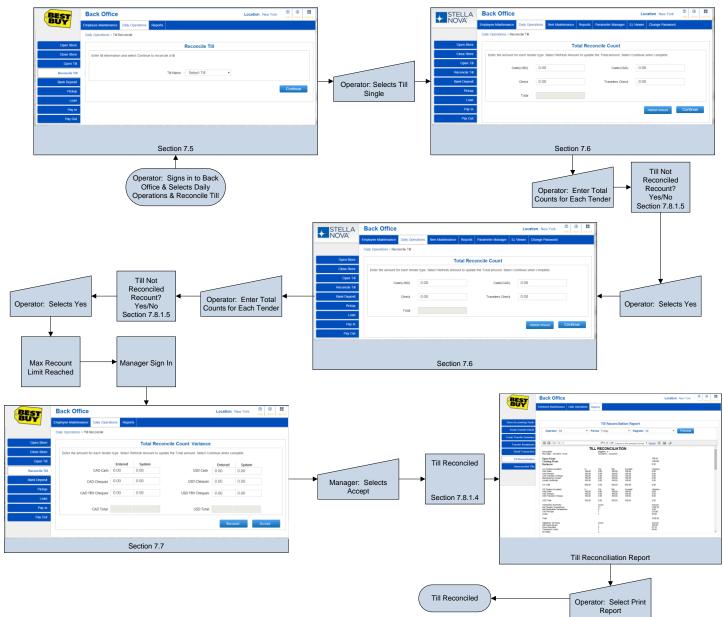


2.1.3 Reconcile Till - Accept Variance



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2.1.4 Reconcile Till -Variance Recount



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3. Use Case: Till Open

3.1 Feature Flow

3.1.1 Till Open

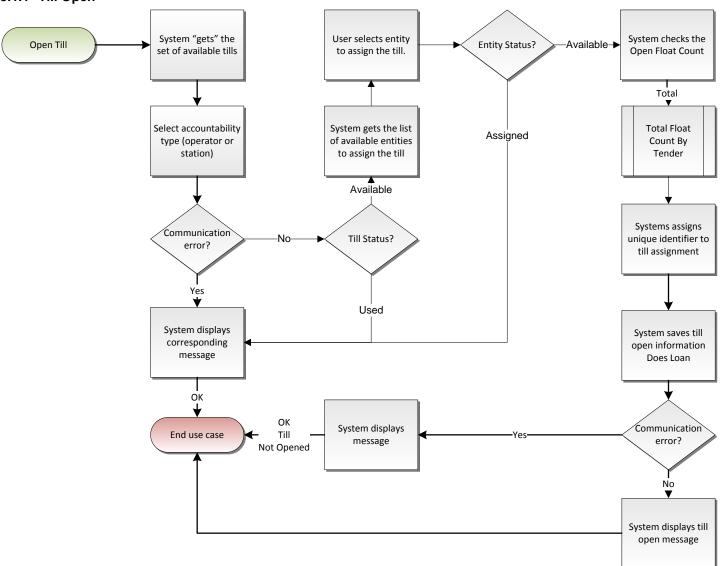
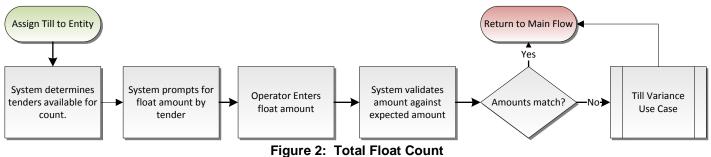


Figure 1: Till Open Flow

3.1.2 Total Float Count



3.2 Preconditions

The operator has selected to open a till.

3.3 Main Flow

1. The system gets a list of available tills and prompts the user to select a till and the accountability type (operator or station (multiple users))

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- 2. If the entered till ID is currently open or has been opened for the current business day, the system displays a message, use case ends and restarts Main Flow.
- 3. Based on the selection, the system displays a list of operators or payment stations. The list only contains entities that do not already have an Active Till assigned. The user selects an entity to assign to a till.
- 4. If the entered entity is currently assigned a till, the system displays a message, and system returns to 3 above.
- If a communication error occurs, the system displays a message, the operator acknowledges the message and the use case ends.
- 6. The Total Float Count Alternate Flow (section 3.4.1) is executed.
- 7. The system assigns a unique identifier number to the till assignment.
- 8. The system saves the till open information to the database.
- 9. If a communication error occurs, the system displays a message, the till remains unopened and the use case ends.
- 10. The system displays a message stating the till was opened successfully and the use case ends.

3.4 Alternate Flow

3.4.1 Total Float Count Alternate Flow

- 1. The system determines which tenders are available for the float
- 2. The system prompts the operator to enter the amount for each tender type.
- 3. The operator enters the total amount and accepts the entry.
- 4. The system compares the entered amount with the expected amount based on the Till Float Amount parameter.
- 5. If the entered amount does not match with the expected amount, the Till Variance Use Case is executed.
- 6. If the entered amount matches the expected amount, the Main Flow resumes at bullet 7 above where the system assigns unique identifier number.

3.5 Special Requirements

1. If the operator selects to reenter the float amount, the system defaults the previously entered float information.

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4. Use Case: Till Reconcile

4.1 Feature Flow

4.1.1 Till Reconcile

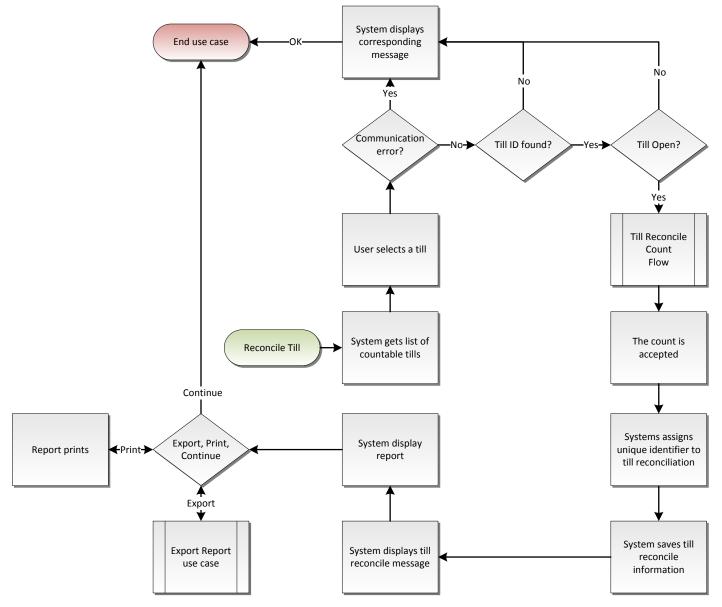
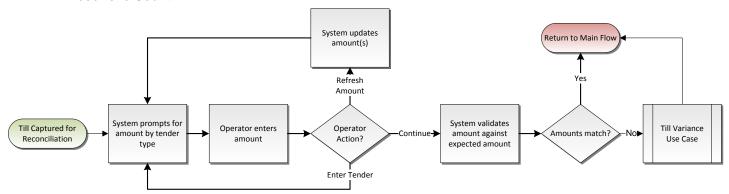


Figure 3: Till Reconcile Flow

4.1.2 Till Reconcile Count



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Figure 4: Till Reconcile Flow

4.2 Preconditions

- The operator has removed the float from tenders to be counted.
- The operator has selected to reconcile a till.

4.3 Main Flow

- 1. The system displays the list of tills that are available for till reconciliation.
- 2. The operator selects the appropriate till.
- If a communication error occurs or till not valid, the system displays a message, the operator acknowledges the message and the use case ends.
- 4. The Total Reconcile Count Alternate Flow (section 4.4.1) is executed.
- 5. The system assigns a unique identifier number to the till reconciliation.
- The system saves the till information to the database.
- 7. The system displays a message that the till was successfully reconciled.
- 8. The operator acknowledges the message.
- 9. The system displays a reconciliation report (defined in Reports Feature Document) and prompts the operator to export or print the report or continue.
- 10. If the operator selects to export, the Export Report use case is executed.
- 11. If the operator selects to print, the Print Report alternate flow is executed.
- 12. The operator selects to continue.
- 13. The use case ends and the system returns to the calling use case.

4.4 Alternate Flow

4.4.1 Total Reconcile Count Alternate Flow

- 1. The system checks the Tenders to Count at Reconcile parameter.
- 2. The system displays the tender types to count based on the Tenders to Count at Reconcile parameter.
- 3. The system prompts the operator to enter the total amount for each tender type and select Refresh Amount to view the totals or continue when reconciling tenders is complete.
- 4. The operator enters the total amount for each tender type.
- 5. If the operator selects to Refresh Amount view the entered totals, the system calculates and displays the total amounts for each tender type.

6. The operator selects continue when complete, the system calculates the total amounts for each tender type.

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- 7. The system compares the entered amount with the amount cash tenders received.
- 8. If the entered amount is not a match with the expected amount, the Till Variance Use Case is executed.
- 9. If the entered amount matches the expected amount, the Main Flow resumes at bullet 5 above where the system assigns a unique identifier number to the till reconciliation.

4.5 Special Requirements

1. The float amount is not included in the expected amounts for reconciliation.

5. Use Case: Till Variance

5.1 Feature Flow

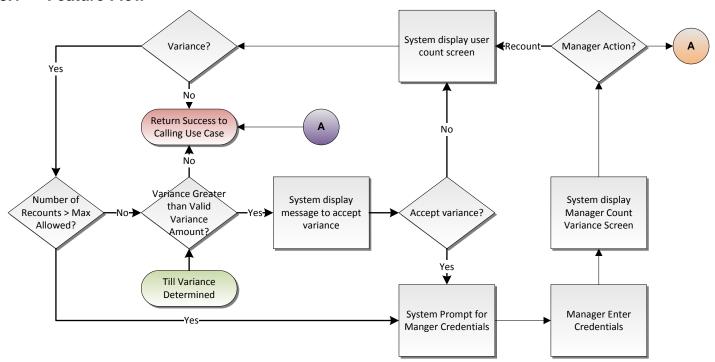


Figure 5: Till Variance Flow

5.2 Preconditions

• Till count variance determined.

5.3 Main Flow

- 1. The system evaluates the variance difference.
- If the difference is less than or equal to Valid Variance Amount (section 0), the use case ends and the system returns success to the calling use case.
- 3. If the difference is greater than Valid Variance Amount (section 0), the system displays message indicating a variance between the entered and expected amounts and prompts the operator to accept the entered amount or reenter the tender amounts.
- 4. If the operator selects to reenter the amount, the system executes the Recount Variance Counts Alternate Flow (section 5.4.2).
- If the operator selects to accept the entered amount, system executes Manager Accept Variance Alternate Flow (section 5.4.1).
- 6. System returns success to calling use case.

5.4 Alternate Flow

5.4.1 Manager Accept Variance Alternate Flow

- 1. The system prompts for manager credentials.
- Manager enters credentials and system displays the Manager Total Reconcile Count Variance (section 7.7).

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- 3. If manager selects recount, the system executes the Total Reconcile Count Alternate Flow (section 4.4.1).
- 4. If manager selects accept, the system returns success to the calling use case.

5.4.2 Recount Variance Counts Alternate Flow

- 1. System displays the count screen.
- The operator enters the total amount for each tender type.
- 3. If the operator selects to Refresh Amount view the entered totals, the system calculates and displays the total amounts for each tender type.
- 4. The operator selects continue when complete, the system calculates the total amounts for each tender type.
- 5. The system compares then entered amount with the expected amounts.
- 6. If no variance, system returns success to calling use case.
- 7. If the entered amount is not within the variance amount with the expected amount, the system evaluates the number of recounts.
- 8. If the recounts is not greater than the max allowed, system restarts the Main Flow.
- 9. If the recounts are greater than the max allowed, system executes Manager Accept Variance Alternate Flow (section 5.4.1).

6. Assumptions

- 1. A till can have one of two statuses: Open or Reconciled.
- 2. A reconciled till is not available for use until opened.
- 3. An entity (Operator or Payment Station) can only have one Open till assigned to them at one time.
- 4. The float amount is in local currency.
- 5. The tenders available for the open count are configurable. Typically, the open count will only be cash.
- 6. A payment station is configured to not be a valid selection for till assignment.

7. Screen Layouts

7.1 General Till Functions Layouts

7.1.1 Left Hand Navigation

Label	Next Screen	Notes
Open Store	Daily Operations use case	
Close Store	Daily Operations use case	
Open Till	Open Till	
Reconcile Till	Reconcile till	
Bank Deposit	Bank Deposit use case	

7.2 Open Till

This screen is displayed when the operator selects to open a new till. The page prompts the operator to select the till from the list and select the accountability type.

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7.2.1 Mockup

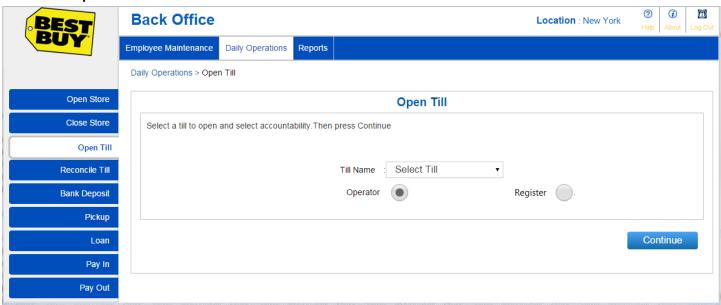


Figure 6: Open Till Screen

7.2.2 Instruction Text

Instruction Text	
Select the till to open and the accountability type. The press Conti	nue

7.2.3 Menu Buttons

Button	Next Screen	Notes
Continue	 Communication Error: Communication Error Till ID already used: Till ID Already Used Operator Accountability and operator has an assigned till: Operator Assignment Error Station Accountability and station has an assigned till: Station Assignment Error 	

7.2.4 Data/Input Field

Label	Editable	Req'd?	Data Type	Min Length	Max Length	Notes
Select till Name	No	Yes	List Box	N/A	N/A	The list will contain all of the available tills that can be opened.
Accountability Type	No	Yes	Selection	N/A	N/A	The user will select one of the radio buttons to determine the accountability type of the till.

7.3 Assign Till

This screen is displayed during the opening of the till. The page prompts the operator to select an entity (operator or payment station) from the list provided. This will assigned the till to the selected entity.

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7.3.1 Mockup

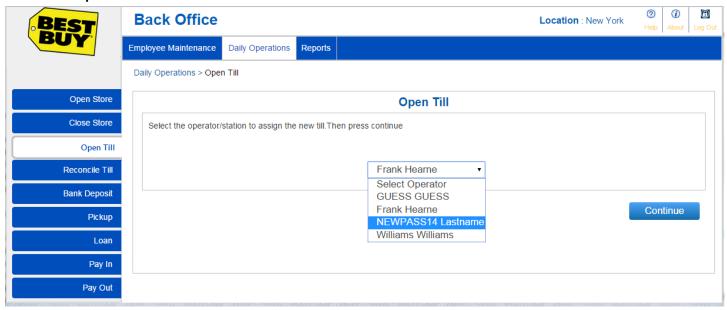


Figure 7: Assign Till Screen

7.3.2 Instruction Text

Instruction Text
Select the entity to assign the till. Select Continue when complete.

7.3.3 Menu Buttons

Button	Next Screen	Notes
Continue	Communication Error: Communication ErrorTotal Float Count	

7.3.4 Data/Input Field

Label	Editable	Req'd?	Data Type	Min Length	Max Length	Notes
Enter Operator/ Station	Yes	Yes	List Box	N/A	N/A	List box to enter NTID or name (operators or payment stations depending on the section on the previous screen) to assign the till.

7.4 Total Float Count

This screen is displayed during the counting of the float amount for the till. The page prompts the operator to enter the total amount of each "loanable" tender. **Note that the tenders below are examples and the actual tenders will be defined in the database.**

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7.4.1 Mockup

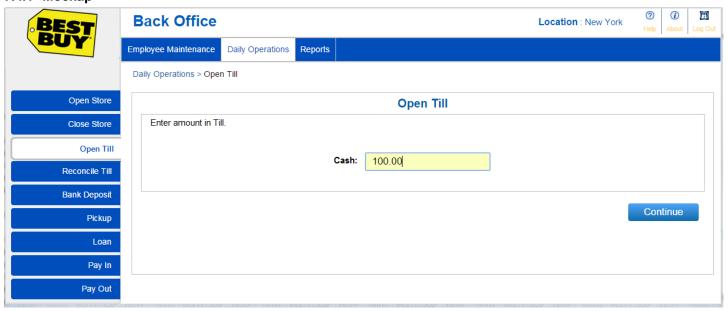


Figure 8: Total Float Count Screen

7.4.2 Instruction Text

Instruction Text

Enter the amount for each tender type. Select Refresh Amount to update the Total amount. Select Continue when complete.

7.4.3 Menu Buttons

Button	Next Screen	Notes
Continue	 Communication Error: Communication Error Float Correct: Till Function Complete 	None
Refresh Amount	 Communication Error Redisplay the same screen with updated Total. 	Will accumulate the amounts entered for each tender and update the Total field

7.4.4 Data/Input Field

Label	Editable	Req'd?	Data Type	Min Length	Max Length	Notes
Enter float amount	Yes	Yes	Currency	4	9	Masked as 6.2 (000000.00). This is done for each "Loanable" tender.
Total	No	No	Currency	4	9	This is the "running" total of the tender amounts entered. It will be updated when the "Refresh Amount" button is pressed.

7.5 Reconcile Till

This screen is displayed when the operator selects to close an open till. The page prompts the operator to select the till that they want to close.

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7.5.1 Mockup

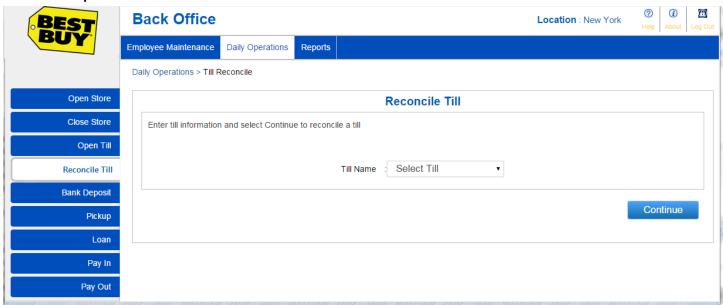


Figure 9: Reconcile Till Screen

7.5.2 Instruction Text

Instruction Text
Select the till from the list. The press Continue.

7.5.3 Menu Buttons

Button	Next Screen	Notes
Continue	Communication Error: Communication ErrorTotal Reconcile Count	None
Refresh Amount	 Communication Error Redisplay the same screen with updated Total. 	Will accumulate the amounts entered for each tender and update the Total field

7.5.4 Data/Input Field

Label	Editable	Req'd?	Data Type	Min Length	Max Length	Notes
Select till	No	Yes	List Box	N/A	N/A	The list contains the tills that are in a state (Open) and available for closing

7.6 Total Reconcile Count

This screen is displayed during till reconciliation. The page prompts the operator to enter the total amount of each tender type. Note the tenders show here are just examples. The tenders that display will be based on whether the tender is "Countable" or not. If there are foreign currency tenders, a total of all of the foreign currency will display (just like the total for the local currency). For example, if the store was configured to take US dollars, Canadian dollars and Mexican Pesos, the screen would show a total for each.

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7.6.1 Mockup

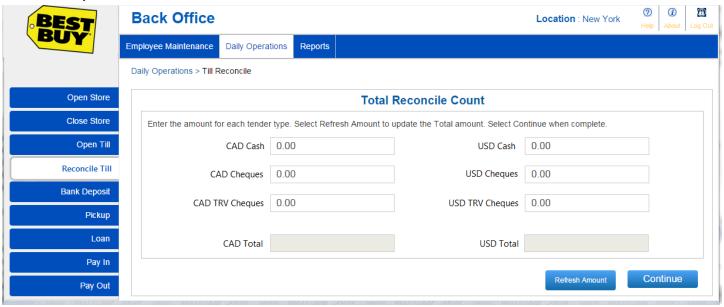


Figure 10: Total Reconcile Count Screen

7.6.2 Instruction Text

Instruction Text

Enter the amount of each tender type. Select Refresh Amount to get an updated amount and select Continue when complete.

7.6.3 Menu Buttons

Button	Next Screen	Notes
Refresh Amount	Total Reconcile Count	Updates the Total field
Continue	Communication Error: Communication Error	None
	Variance: Confirm Variance	
	No variance: Till Function Complete	

7.6.4 Data/Input Field

Label	Editable	Req'd?	Data Type	Min Length	Max Length	Notes
CAD Cash:	Yes	No	Currency	4	9	Masked as 6.2 (000000.00). Note the tenders show here are just examples. The tenders that display will be based on whether the tender is "Countable" or not.
CAD Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
CAD Traveler's Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
USD Cash:	Yes	No	Currency	4	9	Masked as 6.2 (000000.00).
USD Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
USD Traveler's Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
CAD Total:	No	N/A	Currency	4	9	Display only
USD Total:	No	N/A	Currency	4	9	Display only

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7.7 Manager Total Reconcile Count Variance

This screen is displayed during till reconciliation process when the operator has counted a configurable amount of times and there is a variance that is greater than the configurable amount. The manager has entered their credentials and this page displays with the system generated totals on the right hand side of the Tender and the operator counted totals on the left. This allows the manager to see where the operator is off on their count. The manager can choose to accept the count or reject it.

7.7.1 Mockup

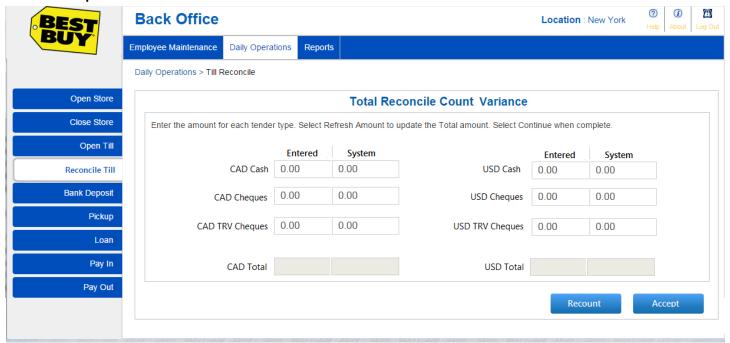


Figure 11: Total Reconcile Count Screen

7.7.2 Instruction Text

Instruction Text
Accept or Reject the counted amounts for the tenders shown.

7.7.3 Menu Buttons

Button	Next Screen	Notes
Accept	The report printsCommunication Error: Communication Error	The count is accepted with the variance. Data is written to the DB as the operator has entered.
Recount	Tender Reconcile Count	The operator is given the chance to recount the tenders in the till.

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7.7.4 Data/Input Field

Label	Editable	Req'd?	Data Type	Min Length	Max Length	Notes
CAD Cash:	Yes	No	Currency	4	9	Masked as 6.2 (000000.00). Note the tenders show here are just examples. The tenders that display will be based on whether the tender is "Countable" or not.
CAD Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
CAD Traveler's Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
Manufacturer's Coupon	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
Loyalty Certificate	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
USD Cash:	Yes	No	Currency	4	9	Masked as 6.2 (000000.00).
USD Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
USD Traveler's Cheque	Yes	No	Currency	4	9	Masked as 6.2 (000000.00)
CAD Total:	No	N/A	Currency	4	9	Display only
USD Total:	No	N/A	Currency	4	9	Display only

7.8 Dialog Messages/Message Boxes

7.8.1.1 Communication Error

Description	This generic message is displayed when there is a communication error between the mobile client and an external system/interface. The Communication Error is displayed on the screen where the communication error occurred. Upon acknowledging the message, the system returns to the previous screen	
Message	Communication error, please try again.	
Key prompt	OK	
Notes	Configurable generic message used when there is a communication error	

7.8.1.2 Operator Assignment Error

Description	This message is displayed when the system is operating under Operator Accountability and the operator ID is linked to an open till. Upon acknowledging the message, the system returns to the previous screen. Note: The system removes the previous entry upon returning to the previous screen.
Message	The operator already has a till assigned. Select OK to reenter the Operator.
Key prompt	OK
Notes	Configurable message

7.8.1.3 Station Assignment Error

Description	This message is displayed when the system is operating under Station Accountability and the station is linked to an open till. Upon acknowledging the message, the system returns to the previous screen. Note: The system removes the previous entry upon returning to the previous screen.		
Message	The station already has a till assigned. Select OK to reenter the Station.		
Key prompt	OK		
Notes	Configurable message		

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7.8.1.4 Till Function Complete

Description	This message is displayed when the till open or reconcile till process is successfully completed. The first <arg> is replaced with the Till Name. The second <arg> is replaced with till function (opened or reconciled).</arg></arg>	
Message	Till <arg> was <arg>.</arg></arg>	
Key prompt	OK	
Notes	Configurable message	

7.8.1.5 Confirm Variance

Description	This message is displayed when the amount entered by the operator does not match the expected amount. The message prompts the operator to continue with the entered amount or reenter the amount. Upon acknowledging the message, the system returns to the previous screen. Note: The system defaults the previous entry upon returning to the previous screen.
Message	The entered amount does not match the expected amount. Do you want to continue with the variance?
Key prompt	YesNo
Notes	Configurable message reused anywhere a count is completed by the operator. In this case if the user selects "Yes" but does not have permissions for overriding the variance, a manager authorization screen should display. The manager must enter their User ID and Password before the count can be accepted.

8. Configurable Settings

Parameter Mnemonic	Description	Valid Values
Till Float Amount	Determines the default amount of float to be used when a till is opened or reconciled.	• 0.00 to 9,999.99
Tenders available for Open Till ("Loanable")	Determines if a tender is available during the Open process. This will typically only be Local Cash	Cash
Tenders to Count at Reconcile	Determines which tender types appears in the UI during Till Reconcile. This will be set by tender.	The following are examples tenders. These are set by options in the DB. Cash Check Debit Gift Card CA Cash Traveler's Check Manufacturer's Coupon Loyalty Certificates
Accountability	Determines if one or more than one operator can be assigned to a till	Operator (one per till)Shared (more than 1 per till)
Valid Variance Amount	Defines the acceptable variance (+/-).	• 0.00 to 9,999.99
Max Recount Value	The number of times an operator may recount a till before a manager approval is required.	

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9. Logging Changes

9.1 Data Output

Data Element	Description	Destination
Till Name	Name of the till	Database
Float Amount	Entered float amount	Database
Timestamp	Time the till was successfully opened or reconciled	Database
Tenders	The amount for each tender entered during the reconcile	•
	process. Driven by the database option.	

10. Interface Changes

None

11. Out Of Scope

• This Specification covers the implementation of Till Functions. Functionality that has no impact on this processes are not covered unless needed to provide context.

12. Change Requests Under Consideration

1. Remove Float before reconciling.

13. Business Sign Off

Name	Organization	Approval Email and/or Date Received
Jesse Wielgan	Best Buy	

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14. Technical Sign Off

Name	Organization	Approval Email and/or Date Received
Mark Houghton	Best Buy	
Kevin Bahng	Best Buy	

15. Technical Review

Name	Organization	Approval Email and/or Date Received
Andy Liang	Best Buy	

16. Technical Inform

Name	Organization	Approval Email and/or Date Received
Gaurav Savant	Best Buy	
Greg Irvine	Best Buy	
David Hawkins	Storeworks	
Mark Donley	Storeworks	
Vinodh Narayanan	Storeworks	

17. Revision History

17.1 Reviews

Date	Iteration	Result
7/23/2015	V1.0 – Internal Review	Updates in v1.1
8/6/2015	V1.1 – BBYCA Review	Updates in v1.2

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17.2 Revision History

Reviser	Revision	Date	Version
Amy Byers	Initial Document	7/9/2015	1.0
Amy Byers	Internal Review updates	7/28/2015	1.1
Amy Byers	 Section 2: Updated screen flows with updated screen mockups. Section 4.1.1: Updated flow to remove duplicate variance checking. Section 4.4.1: Removed reference to blind close configuration. Sections 5.1, 5.3 & 5.4: Updated flow to include manager variance count screen. Section 6: Added assumption that payment stations will not have a drawer/till assigned. Section 7: Updated screen mockups Section 8: corrected references to loan Added max recount value configuration Section 16: Replaced Sam Martinez with Gaurav Savant and corrected spelling of Greg Irvine's name. 	8/19/2015	1.2
Amy Byers	 CR SWBBYC124 Section 4.2: Added that float is removed from till by operator prior to beginning reconcile. Section 4.4.1: Clarified that amount validated against is the cash tenders received not the amount in the drawer (excludes float). Section 4.5: Added note that float is not included in amounts for reconciliation. 	10/27/2015	1.3
Amy Byers	 Sections 7.2.4, 7.3.4 & 7.5.4: Corrected definitions of list boxes on screens. 	12/17/2015	1.4
Amy Byers	 Section 7.3.4: Corrected Text Box to List Box 	12/22/2015	1.5

18. Appendix A: Referenced Documentation

• BBYCA_BO_Reports FDoc v1.0.docx

19. Appendix B: Glossary

Term	Definition